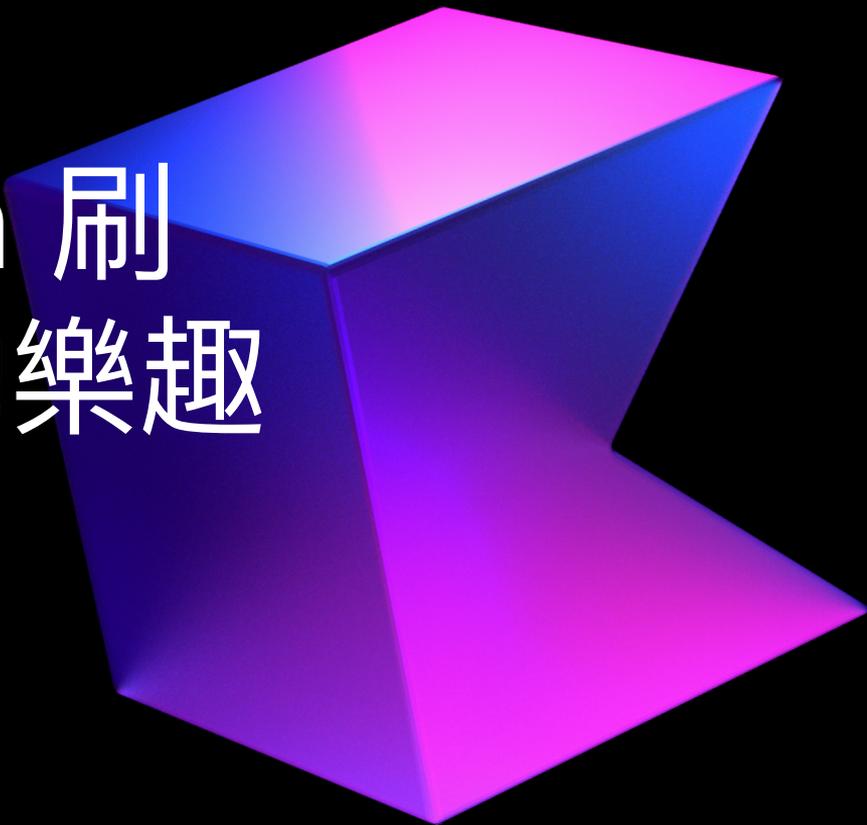
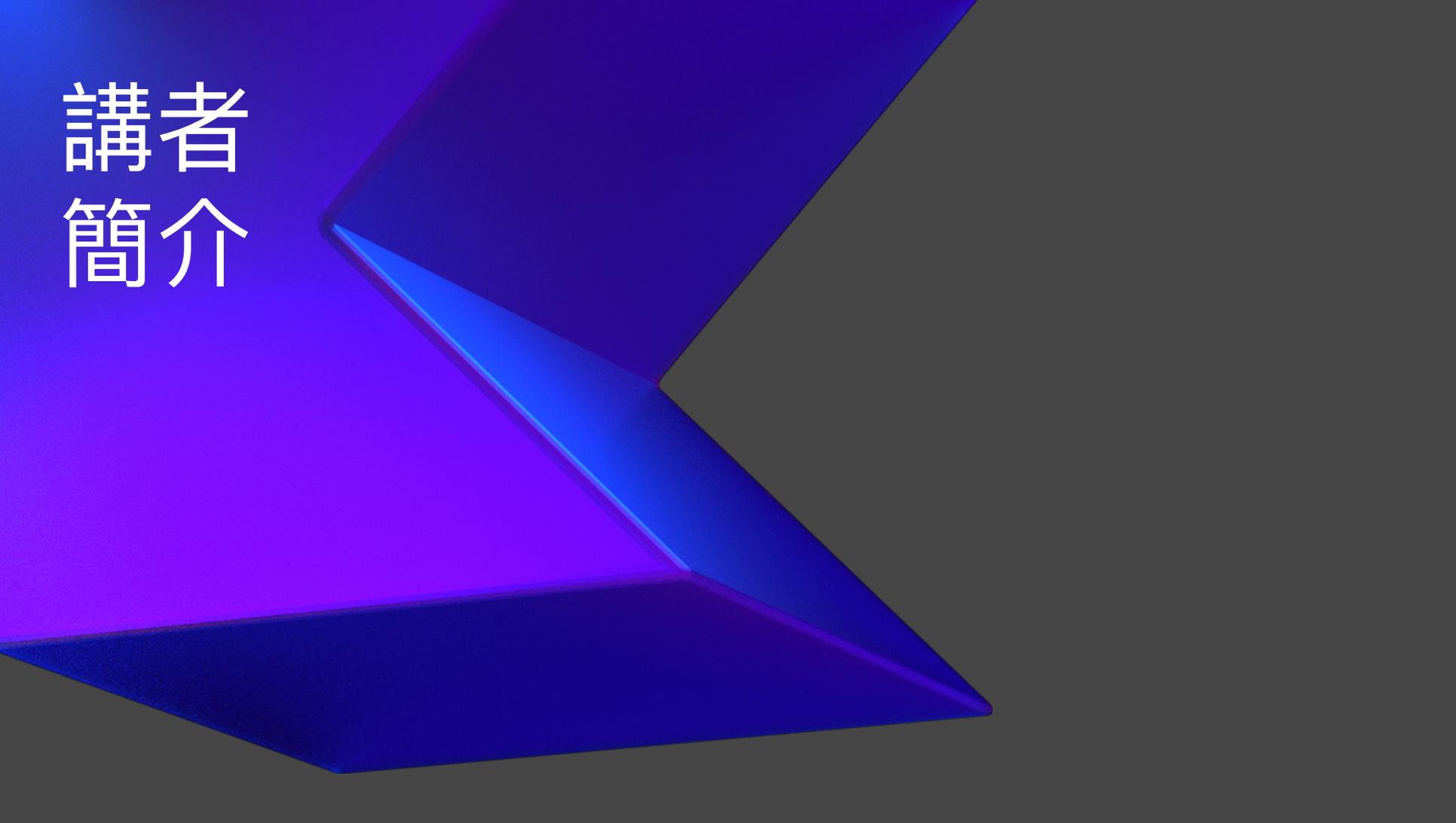


享受用 Kotlin 刷 LeetCode 的樂趣

李盈瑩



講者 簡介



李盈瑩 Kate

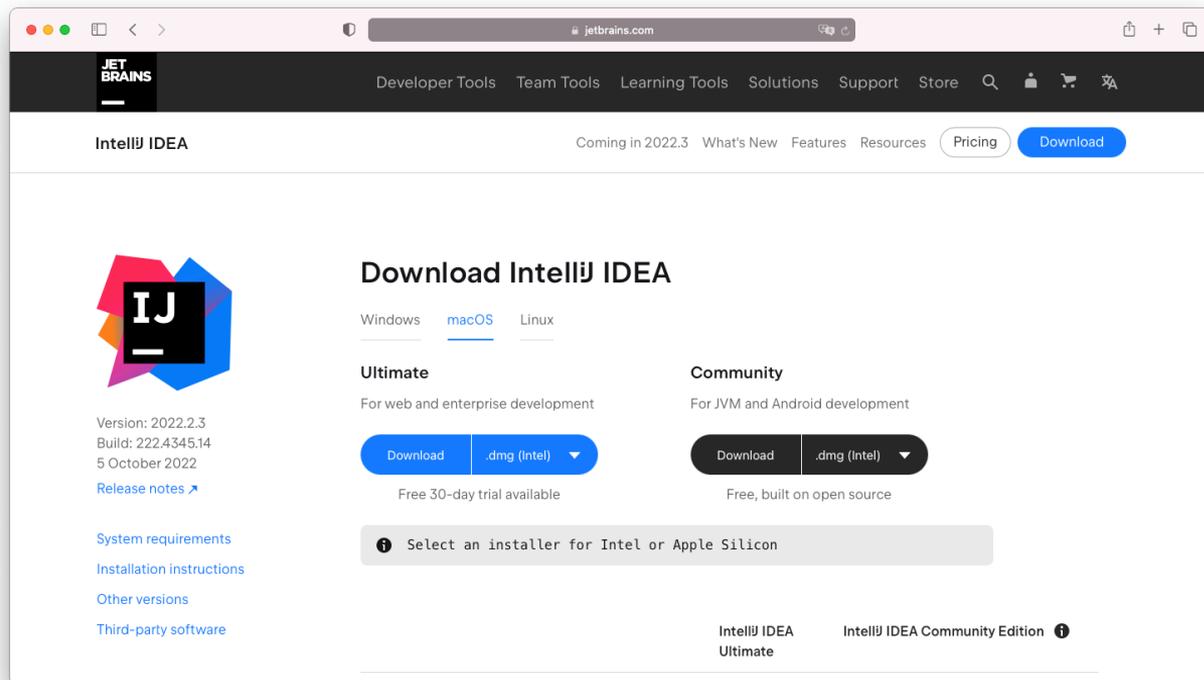
- Android APP 開發者
- Kotlin讀書會2020第二梯次主持
- COSCUP2021講者Firebase with Ktor
- 《老姐要用Kotlin寫專案》鐵人賽書籍作者
- 《不解題就不能離開的房間》鐵人賽文章作者



LeetCode Plugin

The background features a dark grey gradient on the right side, transitioning into a complex, abstract geometric shape on the left. This shape is composed of several overlapping, faceted planes in various shades of blue and purple, creating a 3D effect. The planes are sharp and angular, with some appearing to recede into the distance while others are more prominent in the foreground.

IntelliJ IDEA



The screenshot shows the IntelliJ IDEA download page on the JetBrains website. The browser address bar shows 'jetbrains.com'. The navigation menu includes 'Developer Tools', 'Team Tools', 'Learning Tools', 'Solutions', 'Support', and 'Store'. The main heading is 'IntelliJ IDEA', with a 'Download' button. Below the heading, there are links for 'Coming in 2022.3', 'What's New', 'Features', 'Resources', 'Pricing', and 'Download'. The page is divided into two main sections: 'Ultimate' and 'Community'. The 'Ultimate' section is for web and enterprise development, offering a free 30-day trial. The 'Community' section is for JVM and Android development, which is free and built on open source. Both sections have 'Download' buttons with a dropdown menu for '.dmg (Intel)'. A message at the bottom says 'Select an installer for Intel or Apple Silicon'. The footer includes 'IntelliJ IDEA Ultimate' and 'IntelliJ IDEA Community Edition'.

JET BRAINS

Developer Tools Team Tools Learning Tools Solutions Support Store

IntelliJ IDEA

Coming in 2022.3 What's New Features Resources Pricing Download

Download IntelliJ IDEA

Windows macOS Linux

Ultimate

For web and enterprise development

Download .dmg (Intel)

Free 30-day trial available

Community

For JVM and Android development

Download .dmg (Intel)

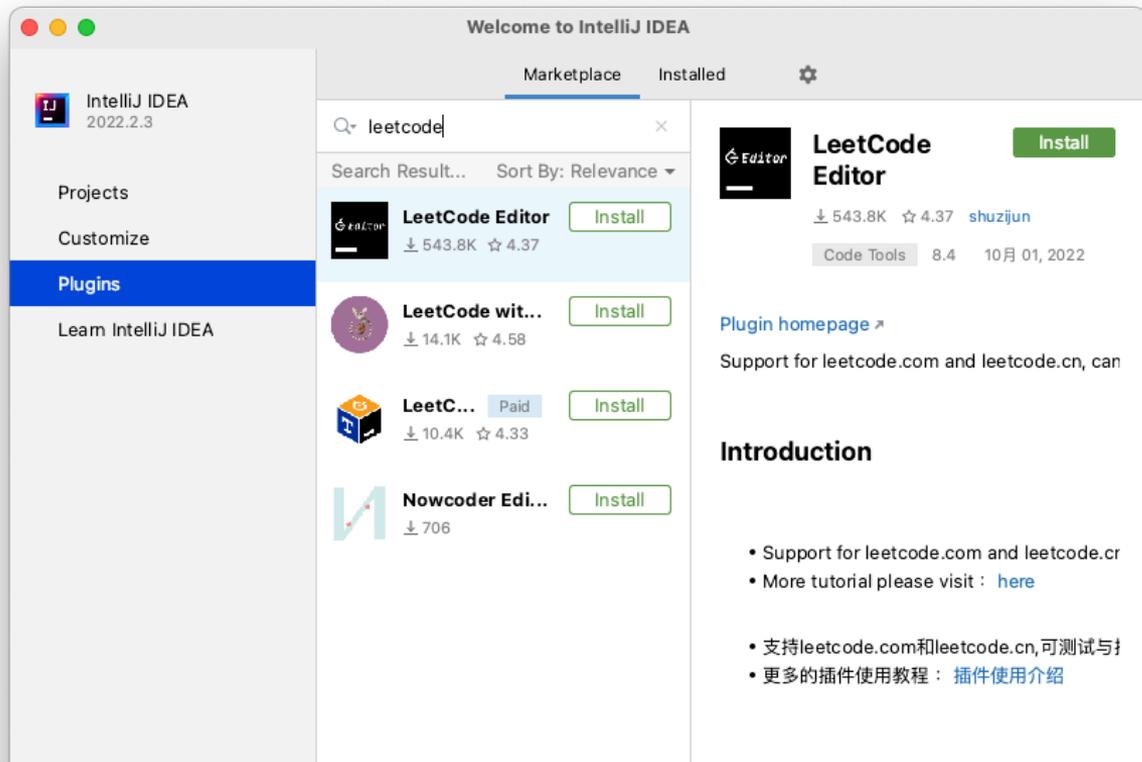
Free, built on open source

Select an installer for Intel or Apple Silicon

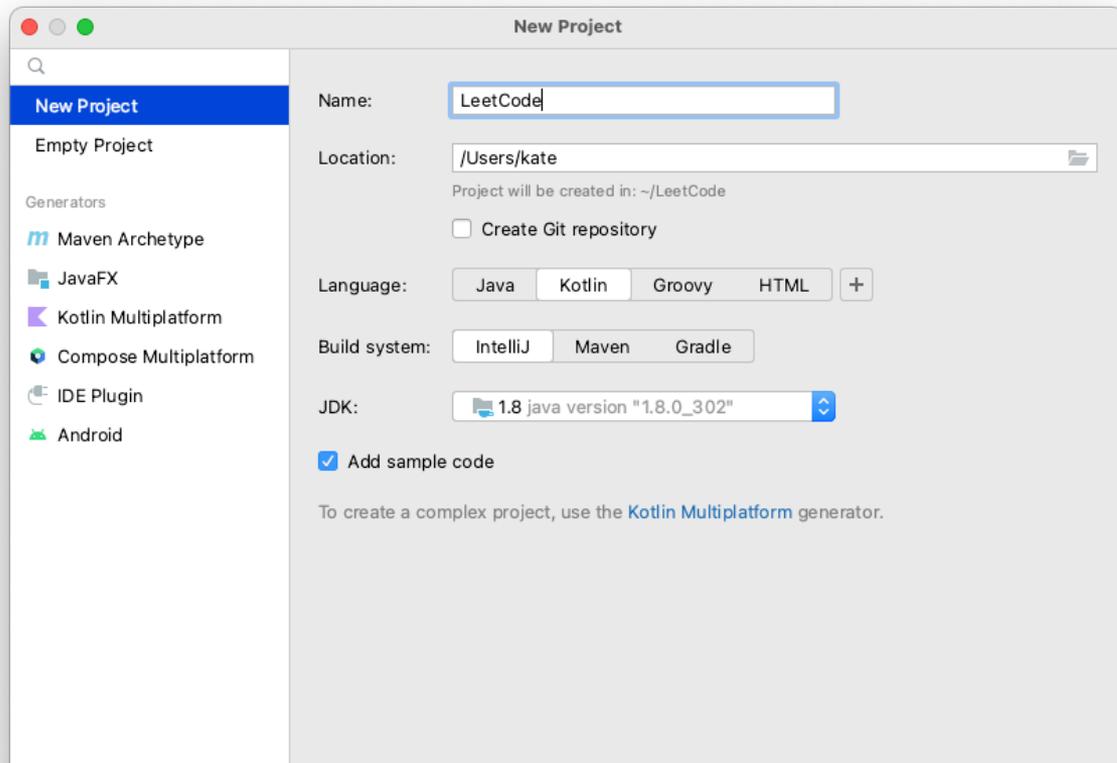
IntelliJ IDEA Ultimate

IntelliJ IDEA Community Edition

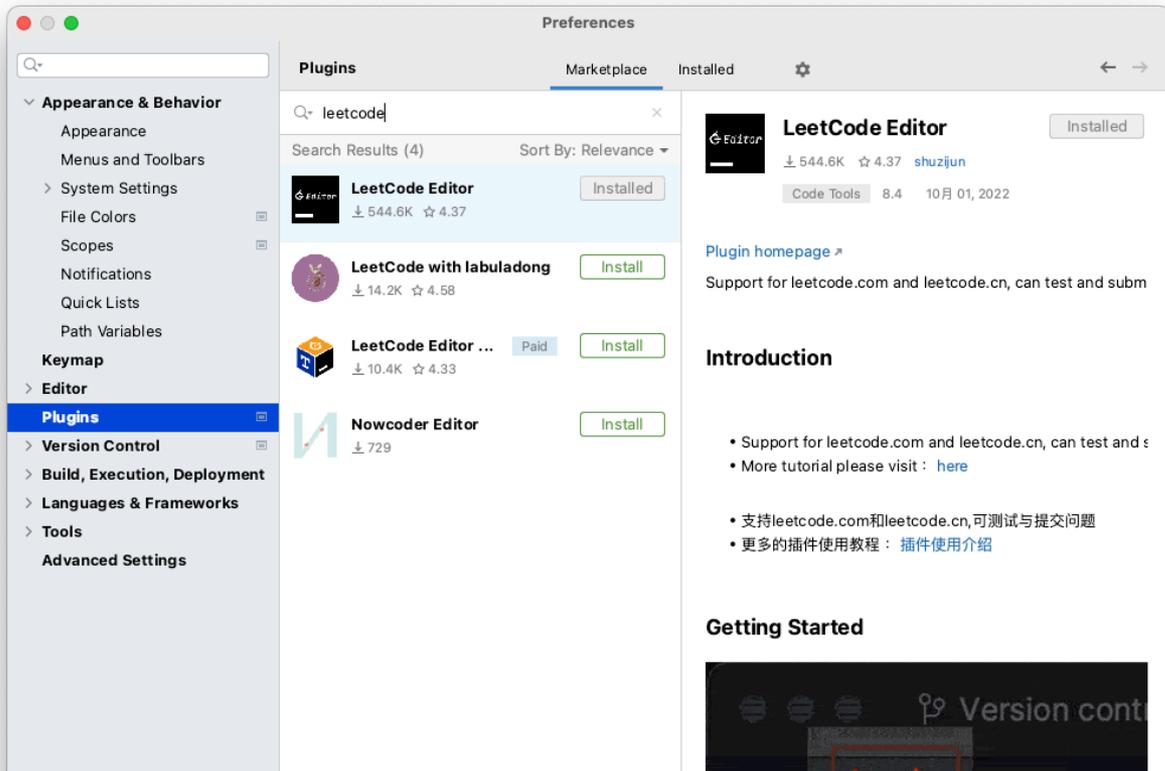
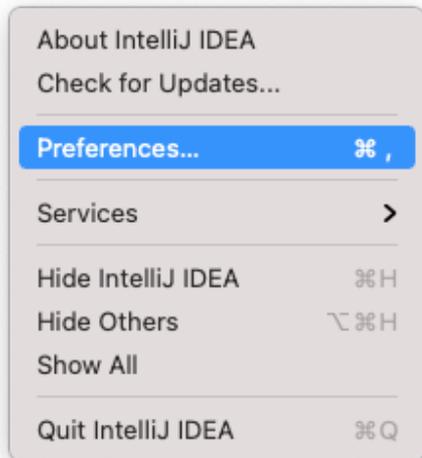
LeetCode Editor



New Kotlin Project

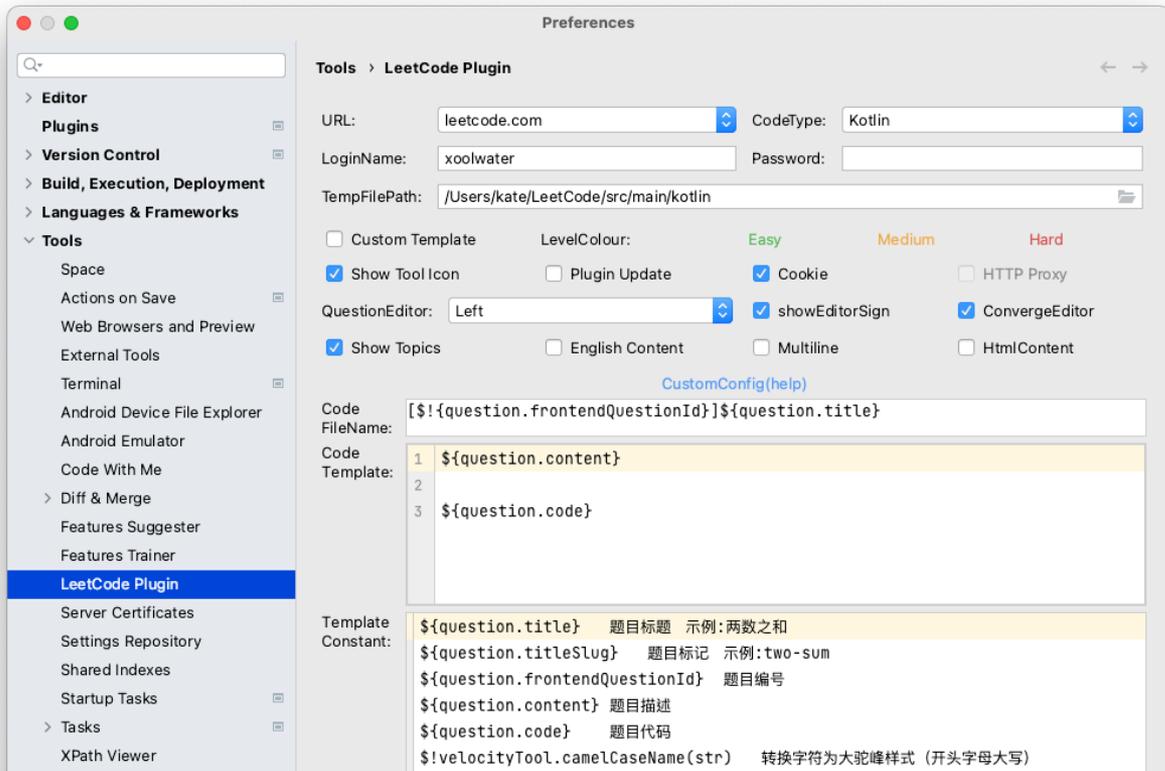


LeetCode Editor

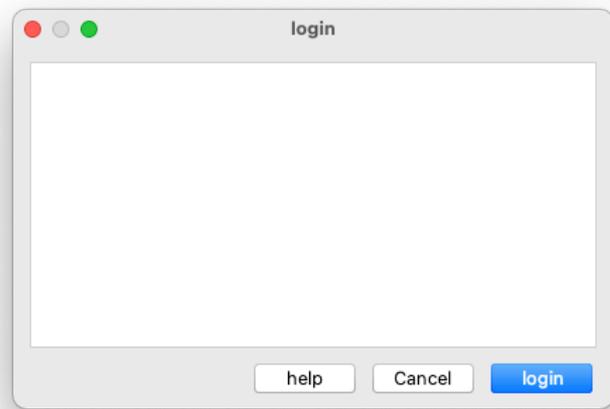


Settings

- URL
- CodeType
- LoginName



LeetCode Panel



S	Title	AC	DD	F
D	[279]Perfect Squares	52.3%	Medium	0.0%
	[1]Two Sum	49.1%	Easy	0.0%
	[2]Add Two Numbers	39.8%	Medium	0.0%
	[3]Longest Substring Without Repe...	33.8%	Medium	0.0%
	[4]Median of Two Sorted Arrays	35.3%	Hard	0.0%
	[5]Longest Palindromic Substring	32.4%	Medium	0.0%
	[6]Zigzag Conversion	43.2%	Medium	0.0%
	[7]Reverse Integer	27.3%	Medium	0.0%
	[8]String to Integer (atoi)	16.6%	Medium	0.0%
	[9]Palindrome Number	53.0%	Easy	0.0%
	[10]Regular Expression Matching	28.2%	Hard	0.0%
	[11]Container With Most Water	54.3%	Medium	0.0%

LeetCode Cookies

The image shows a Chrome browser window with the LeetCode website open. The browser's developer menu is open, displaying various options such as '永遠顯示書籤列', '啟用全螢幕模式時一律顯示工具列', and '開發人員選項'. The '開發人員選項' (Developer Tools) option is selected, and a sub-menu is visible with options like '檢視原始碼', '開發人員工具', and '檢查元素'. The LeetCode website content includes a navigation bar with 'Interview', 'Contest', 'Discuss', and 'Store' links, a 'Black Friday Sale' banner, and a 'LeetCode's Interview Crash Course' advertisement. The main content area features a list of job postings, including one for 'LeetCode post' and another for 'An anonymous user posted LinkedIn | Software Engineer | Bangalore'. The right sidebar contains a 'Want to contribute?' section with a 'Contribute' button, a 'LeetCode Contest' section with a 'Join Contest' button, and a 'Discuss Now' section with a 'Let's Discuss' button.

LeetCode Cookies

The image shows a screenshot of the LeetCode website with a login modal open and DevTools open on the right. The website header includes navigation links like 'Explore', 'Problems', 'Interview', 'Contest', 'Discuss', and 'Store'. A promotional banner at the top offers '\$30 off on Annual Subscription with code THANKS2022'. The main content area features contest announcements, a 'LeetCode's Interview Crash Course' advertisement, and a 'Want to contribute?' section. The login modal is a simple form with 'help', 'Cancel', and 'login' buttons. DevTools is open to the Network tab, showing the 'Request Headers' for a request to 'leetcode.com'.

LeetCode - The World's Leading Online Programming Community

Get \$30 off on Annual Subscription with code THANKS2022 SALE ENDS in 3d 03:59:35 Learn more

LeetCode Explore Problems Interview **Contest** Discuss Store Black Friday Sale Premium

in 11 hours
Join our Contest [Biweekly Contest 92](#)

in a day
Join our Contest [Weekly Contest 321](#)

LeetCode's Interview Crash Course: Data Structures and Algorithms

Start Learning

Want to contribute?
Help the community, earn up to 1000 LeetCode Coins

Contribute

LeetCode Contest
Participate and win your prizes

Join Contest

Discuss Now
Share interview question
Get solutions

Let's Discuss

login

help Cancel login

Education: 11er-111 Years of Experience: 2.6 Prior Experience: SDE - I at Fintech Date of the Offer: Oct 2022 Company: Amazon Title/Level: SDE - II Location: Bangalore Salary: 38L Signing Bonus: 18L(1st Year) + 12L(2nd) Stock bonus: 20...

DevTools is now available in Chinese!

Always match Chrome's language Switch DevTools to Chinese Don't show again

Elements Console Sources Network Performance >> 19 1

leetcode

Blocked Requests 3rd-party requests

50000 ms 100000 ms 150000 ms 200000 ms

Name Headers Preview Response Initiator Timing Cookies

leetcode.com

Request Headers

common-libs.2500f1842.js :authority: leetcode.com

runtime.87724bff8.js :method: GET

global.edbfc4d36.js :path: /

index.4857ec0d1.js :scheme: https

vendor-libs.0f0931b52.js accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9

new-libs.d88a363a5.js accept-encoding: gzip, deflate, br

index.dcdcf75c4a.js accept-language: zh-TW,zh;q=0.9,en-US;q=0.8,en;q=0.7,ja-JP;q=0.5

index.13c64bdb6.js

49 / 112 requests 40.8 kB / 83.0

Console What's New

Highlights from the Chrome 107 update

Customize keyboard shortcuts
Customize keyboard shortcuts for your favourite commands in DevTools.

Object highlighting in the Memory Inspector
Memory Inspector highlights all the bytes of a C/C++ memory object.

new

LeetCode Problem Generator



LeetCode - [1]Two Sum

LeetCode > src > main > kotlin > leetcode > editor > en > [1]Two Sum.kt

Leetcode [xoolwater]

S	Title	AC	DD	F
D	[279]Perfect Squares	52.3%	Medium	0.0%
✓	[1]Two Sum	49.1%	Easy	0.0%
	[2]Add Two Numbers	39.8%	Medium	0.0%
	[3]Longest Substring Without Repe...	33.8%	Medium	0.0%
	[4]Median of Two Sorted Arrays	35.3%	Hard	0.0%
	[5]Longest Palindromic Substring	32.4%	Medium	0.0%
	[6]Zigzag Conversion	43.2%	Medium	0.0%
✓	[7]Reverse Integer	27.3%	Medium	0.0%
	[8]String to Integer (atoi)	16.6%	Medium	0.0%
✓	[9]Palindrome Number	53.0%	Easy	0.0%
	[10]Regular Expression Matching	28.2%	Hard	0.0%
	[11]Container With Most Water	54.3%	Medium	0.0%
✓	[12]Integer to Roman	61.5%	Medium	0.0%
✓	[13]Roman to Integer	58.2%	Easy	0.0%
✓	[14]Longest Common Prefix	40.8%	Easy	0.0%
	[15]3Sum	32.3%	Medium	0.0%
	[16]3Sum Closest	46.1%	Medium	0.0%
	[17]Letter Combinations of a Phone ...	55.7%	Medium	0.0%
	[18]4Sum	36.4%	Medium	0.0%
	[19]Remove Nth Node From End of List	40.1%	Medium	0.0%
✓	[20]Valid Parentheses	40.6%	Easy	0.0%
✓	[21]Merge Two Sorted Lists	61.9%	Easy	0.0%
	[22]Generate Parentheses	72.0%	Medium	0.0%
	[23]Merge k Sorted Lists	48.5%	Hard	0.0%
	[24]Swap Nodes in Pairs	60.5%	Medium	0.0%
	[25]Reverse Nodes in k-Group	53.7%	Hard	0.0%

[1]Two Sum

Content Solution Submissions Note

Given an array of integers `nums` and an integer `target`, return indices of the two numbers such that they add up to `target`.

You may assume that each input would have **exactly one solution**, and you may not use the **same** element twice.

You can return the answer in any order.

Example 1:

Input: `nums = [2,7,11,15], target = 9`
Output: `[0,1]`
Explanation: Because `nums[0] + nums[1] == 9`, we return `[0,1]`.

Example 2:

Input: `nums = [3,2,4], target = 6`
Output: `[1,2]`

Example 3:

Input: `nums = [3,3], target = 6`
Output: `[0,1]`

Constraints:

- `2 <= nums.length <= 104`
- `-109 <= nums[i] <= 109`

```
//
//Input: nums = [3,3], target = 6
//Output: [0,1]
//
//
// Constraints:
//
//
// 2 <= nums.length <= 104
// -109 <= nums[i] <= 109
// -109 <= target <= 109
// Only one valid answer exists.
//
//
//Follow-up: Can you come up with an algorithm that
//O(n2) time complexity?
//
// Related Topics Array Hash Table 40398 15
--BEGIN--
class Solution {
    fun twoSum(nums: IntArray, target: Int): IntArray {
```

題目

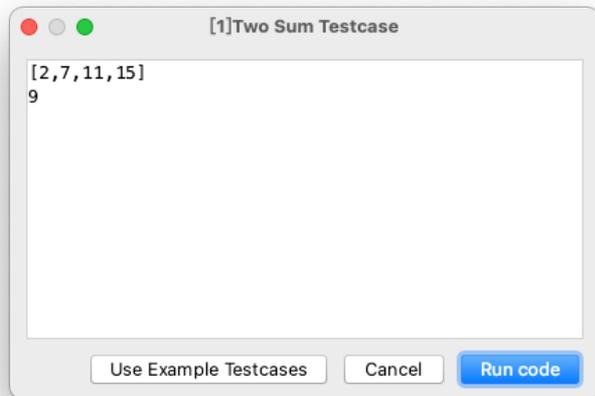
```
[1]Two Sum ×
Content Solution Submissions Note
44
45 Given an array of integers nums and an integer target,
46 return indices of the two numbers such that they add up to
47 target .
48
49 You may assume that each input would have exactly one
50 solution, and you may not use the same element twice.
51
52 You can return the answer in any order.
53
54 Example 1:
55
56 Input: nums = [2,7,11,15], target = 9
57 Output: [0,1]
58 Explanation: Because nums[0] + nums[1] == 9, we return [0, 1].
59
60 Example 2:
61
62 Input: nums = [3,2,4], target = 6
63 Output: [1,2]
64
65 Example 3:
66
67 Input: nums = [3,3], target = 6
68 Output: [0,1]
69
70 Constraints:
```

程式碼

```
1 //Given an array of integers nums 1 3 1 11 ^ v :
2 //two numbers such that they add up to target.
3 //
4 // You may assume that each input would have exactly one solution.
5 //not use the same element twice.
6 //
7 // You can return the answer in any order.
8 //
9 //
10 // Example 1:
11 //
12 //
13 //Input: nums = [2,7,11,15], target = 9
14 //Output: [0,1]
15 //Explanation: Because nums[0] + nums[1] == 9, we return [0,1]
16 //
17 //
18 // Example 2:
19 //
20 //
21 //Input: nums = [3,2,4], target = 6
22 //Output: [1,2]
23 //
```

工具列

```
39 // Only one valid answer exists.
40 //
41 //
42 //
43 //Follow-up: Can you come up with an algorithm that is
44 //O(n^2) time complexity?
45 //
46 // Related Topics Array Hash Table 👍 40398 👎 1303
47
48
49 --BEGIN--
50 class Solution {
51     fun twoSum(nums: IntArray, target: Int): IntArray {
```



Leetcode Console

> 2022/11/22 17:55:05
已提交, 请稍等

> 2022/11/22 17:55:10
解答成功:
执行耗时:403 ms,击败了60.05% 的Kotlin用户
内存消耗:44 MB,击败了16.46% 的Kotlin用户

Structure Bookmarks Notifications

Version Control TODO Problems Terminal Services Leetcode Console

Download pre-built shared indexes: Reduce the indexing time and CPU load with pre-built JDK and Maven library shared indexes // Always download // Download once // Don't sho... (today 3:27 PM), 41:1 LF UTF-8 4 spaces [Two Sum]00:00:15

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
  
    }  
}
```

IDE Feature

--BEGIN--

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        repeat(nums.size) { it: Int  
        }  
        return  
    }  
}
```

--END--

@InlineOnly

```
public inline fun repeat(  
    times: Int,  
    action: (Int) -> Unit  
): Unit
```

Executes the given function `action` specified number of `times`.
A zero-based index of current iteration is passed as a parameter to `action`.

Samples: `samples.misc.ControlFlow.repeat`
`// Unresolved`

kotlin

StandardKt.class

KotlinJavaRuntime (kotlin-stdlib-1.7.21.jar)



```
[1]Two Sum x Standard.kt x  
For detailed usage information see the documentation for scope functions.  
134 @kotlin.internal.InlineOnly  
135 @SinceKotlin( version: "1.1")  
136 public inline fun <T> T.takeUnless(predicate: (T) -> Boolean): T? {  
137     contract { this: ContractBuilder  
138         callsInPlace(predicate, InvocationKind.EXACTLY_ONCE)  
139     }  
140     return if (!predicate(this)) this else null  
141 }  
142  
Executes the given function action specified number of times.  
A zero-based index of current iteration is passed as a parameter to action.  
Samples: samples.misc.ControlFlow.repeat  
// Unresolved  
150 @kotlin.internal.InlineOnly  
151 public inline fun repeat(times: Int, action: (Int) -> Unit) {  
152     contract { callsInPlace(action) }  
153  
154     for (index in 0 ≤ until < times) {  
155         action(index)  
156     }  
157 }
```

IDE Feature

```
--BEGIN--
class Solution {
    fun twoSum(nums: IntArray, target: Int): IntArray {
        for (i in 0 ≤ until < nums.size) {
        }
        return intArrayOf
    }
}
--END--
```

Range could be replaced with 'indices' call
Replace with indices ↵ ↶ ↷ More actions...

```
public infix fun Int.until(
    to: Int
): IntRange
```

Returns a range from this value up to but excluding the specified `to` value.
If the `to` value is less than or equal to this value then the returned range is empty.

[kotlin.ranges](#)
RangesKt.class
KotlinJavaRuntime (kotlin-stdlib-1.7.21.jar)

```
[1]Two Sum x _Arrays.kt x
```

```
7873 public val IntArray.indices: IntRange
7874     get() = IntRange(0, lastIndex)
7875
7876 Returns the range of valid indices for the array.
7877
7878 public val LongArray.indices: IntRange
7879     get() = IntRange(0, lastIndex)
7880
7881 Returns the range of valid indices for the array.
7882
7883 public val FloatArray.indices: IntRange
7884     get() = IntRange(0, lastIndex)
7885
7886 Returns the range of valid indices for the array.
7887
7888 public val DoubleArray.indices: IntRange
7889     get() = IntRange(0, lastIndex)
7890
7891
7892
7893
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        for (i in nums.indices) {  
            for (j in nums.indices) {  
                if (nums[i] + nums[j] == target) {  
                    return intArrayOf(i, j)  
                }  
            }  
        }  
        throw IllegalArgumentException("No two sum solution")  
    }  
}
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        for (i in nums.indices) {  
            for (j in i + 1 until nums.size) {  
                if (nums[i] + nums[j] == target) {  
                    return intArrayOf(i, j)  
                }  
            }  
        }  
        throw IllegalArgumentException("No two sum solution")  
    }  
}
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        val map = HashMap<Int, Int>()  
//Loop  
    }  
}
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        val map = HashMap<Int, Int>()  
        for (i in nums.indices) map[target - nums[i]]?.let {  
            return intArrayOf(it, i)  
        } ?: run { map[nums[i]] = i }  
        throw IllegalArgumentException("No two sum solution")  
    }  
}
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        val map = HashMap<Int, Int>()  
        for (i in nums.indices) {  
            when (val it = map[target - nums[i]]) {  
                null -> map[nums[i]] = i  
                else -> return intArrayOf(it, i)  
            }  
        }  
        throw IllegalArgumentException("No two sum solution")  
    }  
}
```

程式碼

```
class Solution {  
    fun twoSum(nums: IntArray, target: Int): IntArray {  
        val map = HashMap<Int, Int>()  
        map[nums[0]] = 0  
        for (i in 1 until nums.size) {  
            if (map[target - nums[i]] != null)  
                return intArrayOf(map[target - nums[i]]!!, i)  
            map[nums[i]] = i  
        }  
        throw IllegalArgumentException("No two sum solution")  
    }  
}
```

Submissions

The screenshot displays an IDE window titled "LeetCode - [1]Two Sum". The interface is divided into several sections:

- File Explorer:** Shows the project structure with files like "Leetcode", "src", "main", "kotlin", "leetcode", "editor", "en", and "[1]Two Sum.kt".
- Problem List Table:** A table listing various LeetCode problems with their acceptance rates, difficulty levels, and frequencies. The problem "[1]Two Sum" is highlighted in blue.
- Code Editor:** Contains the Kotlin solution for the "Two Sum" problem. The code uses a HashMap to store the frequency of numbers and iterates through the array to find a pair that sums to the target.
- Leetcode Console:** Shows the submission details, including the date and time (2022/11/25 21:26:50), the status "已提交, 请稍等" (Submitted, please wait), and the success message "解答成功:" (Solution successful:). It also provides performance metrics: "执行耗时:335 ms,击败了78.02% 的Kotlin用户" (Execution time: 335 ms, beat 78.02% of Kotlin users) and "内存消耗:33.5 MB,击败了51.89% 的Kotlin用户" (Memory usage: 33.5 MB, beat 51.89% of Kotlin users).

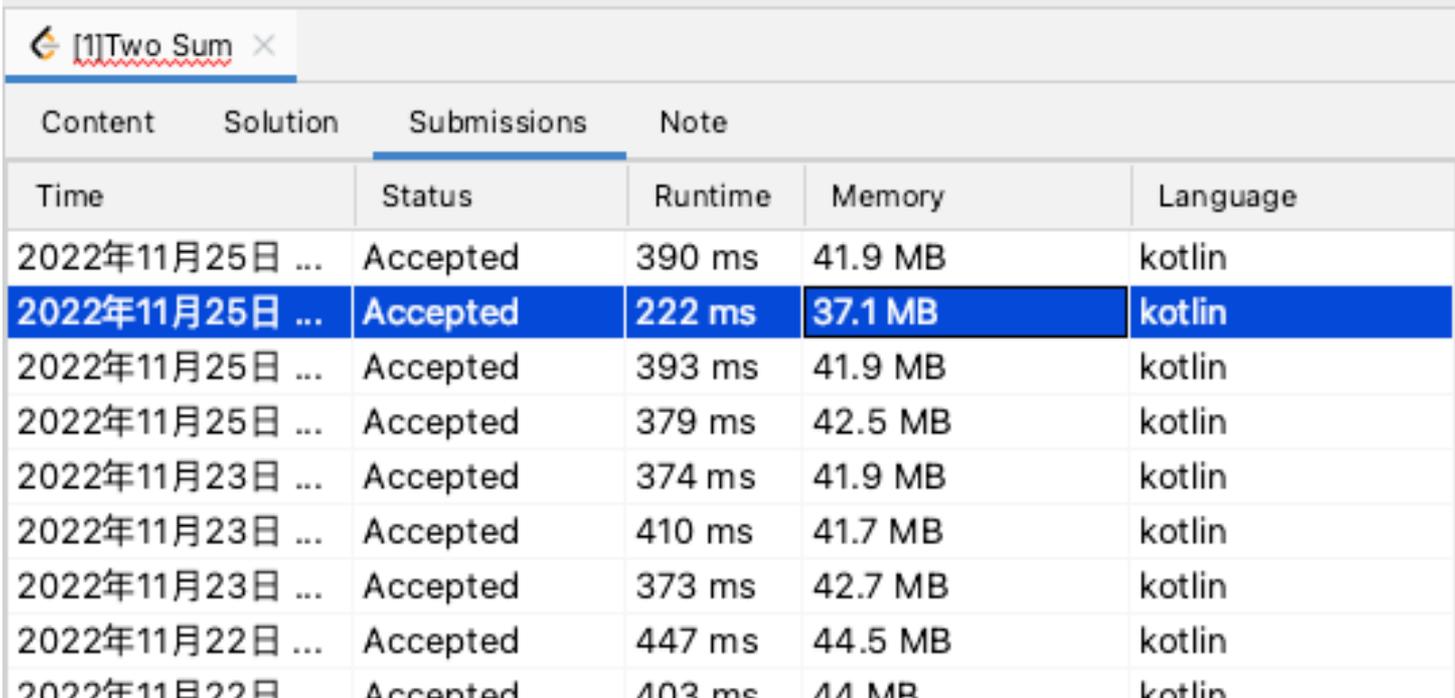
S	Title	AC	DD	F
D	[907]Sum of Subarray Minimums	34.5%	Medium	0.0%
✓	[1]Two Sum	49.1%	Easy	0.0%
	[2]Add Two Numbers	39.8%	Medium	0.0%
	[3]Longest Substring Without Repeating...	33.8%	Medium	0.0%
	[4]Median of Two Sorted Arrays	35.3%	Hard	0.0%
	[5]Longest Palindromic Substring	32.4%	Medium	0.0%
	[6]Zigzag Conversion	43.2%	Medium	0.0%
✓	[7]Reverse Integer	27.3%	Medium	0.0%
	[8]String to Integer (atoi)	16.6%	Medium	0.0%
✓	[9]Palindrome Number	53.0%	Easy	0.0%
	[10]Regular Expression Matching	28.2%	Hard	0.0%
	[11]Container With Most Water	54.3%	Medium	0.0%
✓	[12]Integer to Roman	61.6%	Medium	0.0%
✓	[13]Roman to Integer	58.2%	Easy	0.0%

```
//  
// Related Topics Array Hash Table 👍 46398 🏆 1363  
45  
46  
47  
48  
49 --BEGIN--  
50 class Solution {  
51     fun twoSum(nums: IntArray, target: Int): IntArray {  
52         val map = HashMap<Int, Int>()  
53         map[nums[0]] = 0  
54         for (i in 1 until < nums.size) {  
55             if (map[target - nums[i]] != null)  
56                 return intArrayOf(map[target - nums[i]]!,  
57                     map[nums[i]] = i  
58             )  
59         }  
60         throw IllegalArgumentException("No two sum solution")  
61     }  
62 --END--  
63
```

Leetcode Console

```
> 2022/11/25 21:26:50  
已提交, 请稍等  
  
> 2022/11/25 21:26:54  
解答成功:  
执行耗时:335 ms,击败了78.02% 的Kotlin用户  
内存消耗:33.5 MB,击败了51.89% 的Kotlin用户
```

Submissions



The image shows a screenshot of a submission table for a problem titled "[1]Two Sum". The table has a tabbed interface with "Submissions" selected. The table columns are "Time", "Status", "Runtime", "Memory", and "Language". The second row is highlighted in blue, showing a submission with a runtime of 222 ms and memory usage of 37.1 MB.

[1]Two Sum				
Content	Solution	Submissions	Note	
Time	Status	Runtime	Memory	Language
2022年11月25日 ...	Accepted	390 ms	41.9 MB	kotlin
2022年11月25日 ...	Accepted	222 ms	37.1 MB	kotlin
2022年11月25日 ...	Accepted	393 ms	41.9 MB	kotlin
2022年11月25日 ...	Accepted	379 ms	42.5 MB	kotlin
2022年11月23日 ...	Accepted	374 ms	41.9 MB	kotlin
2022年11月23日 ...	Accepted	410 ms	41.7 MB	kotlin
2022年11月23日 ...	Accepted	373 ms	42.7 MB	kotlin
2022年11月22日 ...	Accepted	447 ms	44.5 MB	kotlin
2022年11月22日 ...	Accepted	403 ms	44 MB	kotlin

Submissions

Two Sum - LeetCode

leetcode.com/problems/two-sum/submissions/849407663/

LeetCode

Problem List

Description Discussion (161) Solutions (13.2K) Submissions

All statuses All languages

Accepted 11 hours ago Kotlin

Accepted Nov 23, 2022 Kotlin

Accepted Nov 23, 2022 Kotlin

Accepted Nov 23, 2022 Kotlin

Accepted Nov 22, 2022 Kotlin

Kate Lee Nov 25, 2022 11:01

Details + Solution

Kotlin

Runtime 222 ms Beats 95.82% Memory 37.1 MB Beats 95.26%

Click to check the distribution chart

Notes

Write your notes here

Related Tags

Select tags 0/5

```
class Solution {
    fun twoSum(nums: IntArray, target: Int): IntArray {
        val map = HashMap<Int, Int>()
        map[nums[0]] = 0
        for (i in 1 until nums.size) {
            if (map[target - nums[i]] != null) {
                return intArrayOf(map[target - nums[i]]!!, i)
            }
        }
    }
}
```

Console Run Submit

LeetCode Problem Search



LeetCode > src > main > kotlin > leetcode > editor > en > [278]First Bad Version.kt

Leetcode [xoolwater] [278]First Bad Version

first-bad-version

Category Lists Difficulty Status Tags

Sort: Title Solution Acceptance Difficulty Frequency

S	Title	AC	DD	F
D	[907]Sum of Subarray Minimums	34.5%	Medium	0.0%
✓	[278]First Bad Version	43.0%	Easy	0.0%
	[165]Compare Version Numbers	35.4%	Medium	0.0%
	[2364]Count Number of Bad Pairs	40.8%	Medium	0.0%
	[41]First Missing Positive	36.6%	Hard	0.0%

Content Solution Subm

You are a product manager that wants to develop a new product but first you need to know if your product fails to market. The product was developed based on n versions. The first version that failed is called the first bad version. After you find it, you will no longer develop any more versions. After a bad version, all the following versions will also fail. You are given an integer n , representing the total number of versions. You are also given a boolean array $isBadVersion$, which is only `true` in the bad versions. Implement a function to find the first bad version. You must write an efficient solution.

Suppose you have n versions. You should find out the first bad one. You are given an API `isBadVersion(version)` which returns whether `version` is bad. Implement a function to find the first bad version. You must write an efficient solution.

LeetCode Problem History



The screenshot shows an IDE window with the following file path: `LeetCode > src > main > kotlin > leetcode > editor > en > [278]First Bad Version.kt`. Below the path is a toolbar with icons for navigation and search. A search bar contains the text "first-bad-version". A dropdown menu is open, listing several LeetCode problems:

- doc
- [1]Two Sum.kt
- [7]Reverse Integer.kt
- [278]First Bad Version.kt**
- [907]Sum of Subarray Minimums

Below the dropdown, there are filter options: "Category" (Lists), "Difficulty", "Status", and "Tag". A "Sort:" dropdown is set to "Title". A table with columns "S", "Title", "AC", "DD", and "F" is partially visible at the bottom.

278. First Bad Version

[Content](#)

[Solution](#)

[Submissions](#)

[Note](#)

You are a product manager and currently leading a team to develop a new product. Unfortunately, the latest version of your product fails the quality check. Since each version is developed based on the previous version, all the versions after a bad version are also bad.

Suppose you have `n` versions `[1, 2, ..., n]` and you want to find out the first bad one, which causes all the following ones to be bad.

You are given an API `bool isBadVersion(version)` which returns whether `version` is bad. Implement a function to find the first bad version. You should minimize the number of calls to the API.

Example 1:

278. First Bad Version

```
34 // Constraints:
35 //
36 //
37 // 1 <= bad <= n <= 231 - 1
38 //
39 //
40 // Related Topics Binary Search Interactive 👍 6523 🙋 248
41
42
43 --BEGIN--
44 /* The isBadVersion API is defined in the parent class Ver
45     fun isBadVersion(version: Int) : Boolean {} */
46
47 class Solution: VersionControl() {
48     override fun firstBadVersion(n: Int) : Int {
49
```

程式碼

```
class Solution: VersionControl() {  
    override fun firstBadVersion(n: Int) : Int {  
    }  
}
```

程式碼

```
class Solution: VersionControl() {  
    override fun firstBadVersion(n: Int) : Int {  
        var start = 1  
        var end = n  
        while (start < end) {  
            val middle = start + (end - start) / 2  
            when (isBadVersion(middle)) {  
                true -> //false? true? true true true  
                else -> //false false false false? true  
            }  
        }  
    }  
    return start  
}
```

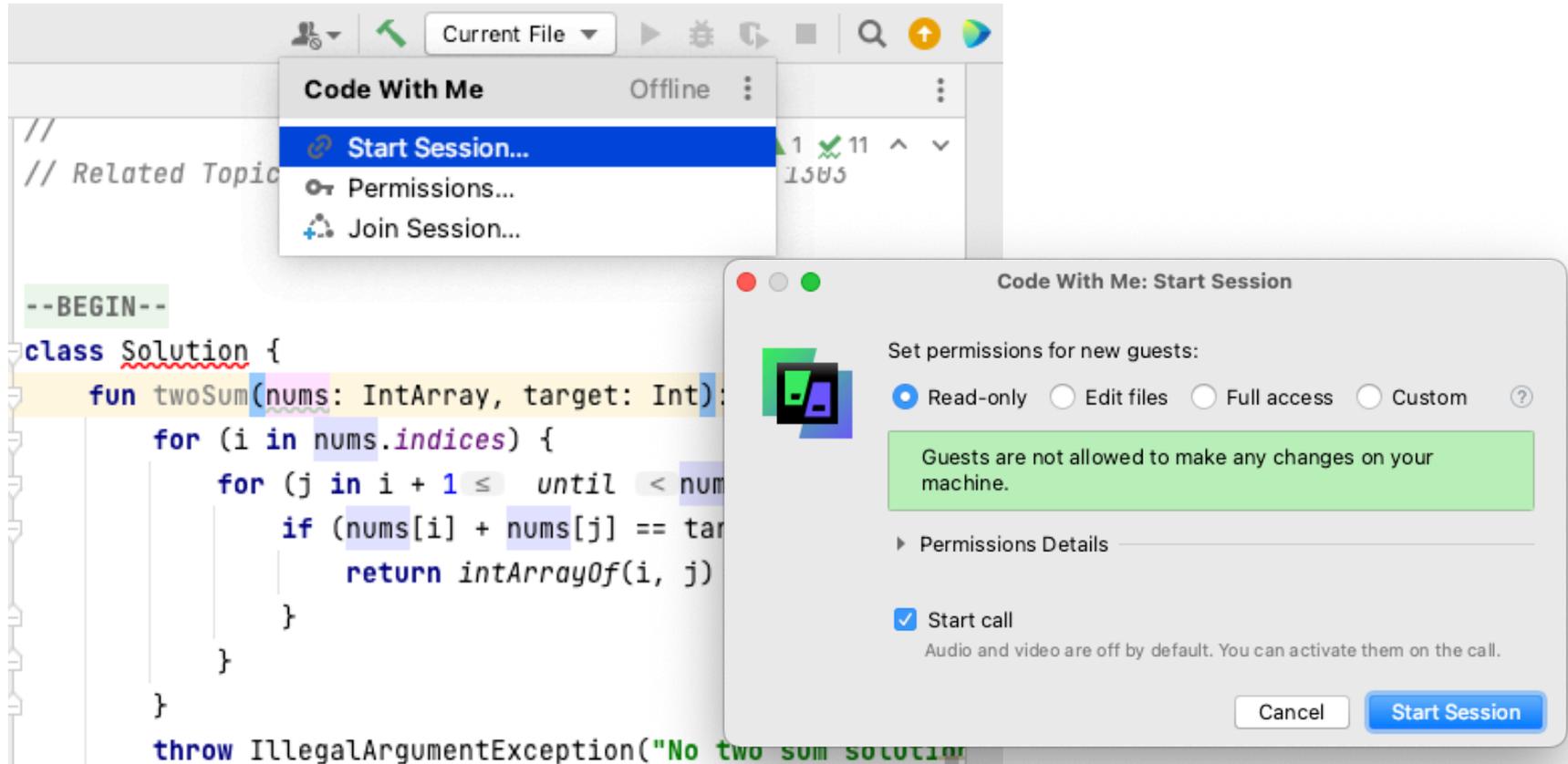
程式碼

```
class Solution: VersionControl() {  
    override fun firstBadVersion(n: Int) : Int {  
        var start = 1  
        var end = n  
        while (start < end) {  
            val middle = start + (end - start) / 2  
            when (isBadVersion(middle)) {  
                true -> end = middle  
                else -> start = middle + 1  
            }  
        }  
    }  
    return start  
}
```

優點

- 點擊題目就會產生對應的kt檔案，不用複製貼上，更不用煩惱檔名。
- IDE會隨時自動檢查語法，網站則需要等到Run之後。
- 移動鼠標才會出現leetcode工具列。
- IDE會推薦不同的語法。
- 利用IDE看函式內容。
- 搭配Git備份。

Code with me



The image shows a screenshot of an IDE interface. A menu titled "Code With Me" is open, showing options: "Start Session...", "Permissions...", and "Join Session...". The "Start Session..." option is highlighted. Below the menu, a dialog box titled "Code With Me: Start Session" is displayed. The dialog box contains the following content:

Code With Me: Start Session

Set permissions for new guests:

Read-only Edit files Full access Custom ?

Guests are not allowed to make any changes on your machine.

▶ Permissions Details

Start call

Audio and video are off by default. You can activate them on the call.

Buttons: Cancel, Start Session

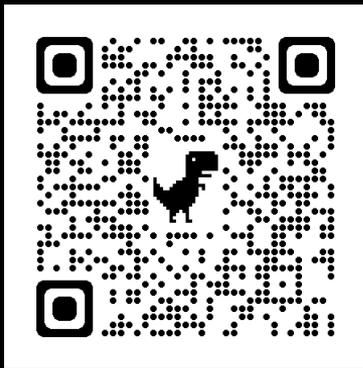
The background shows a code editor with the following code snippet:

```
//  
// Related Topic  
  
--BEGIN--  
class Solution {  
    fun twoSum(nums: IntArray, target: Int):  
        for (i in nums.indices) {  
            for (j in i + 1 until < num  
                if (nums[i] + nums[j] == tar  
                    return intArrayOf(i, j)  
            }  
        }  
    }  
}  
  
throw IllegalArgumentException("No two sum solution")
```

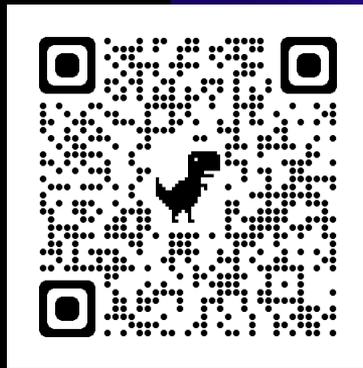
Thanks!

Have a nice Kotlin

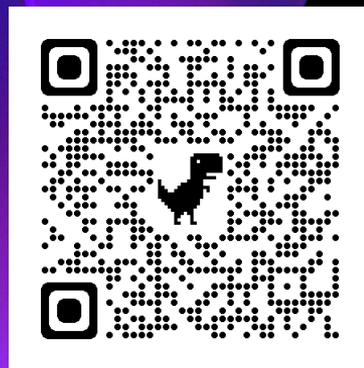
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