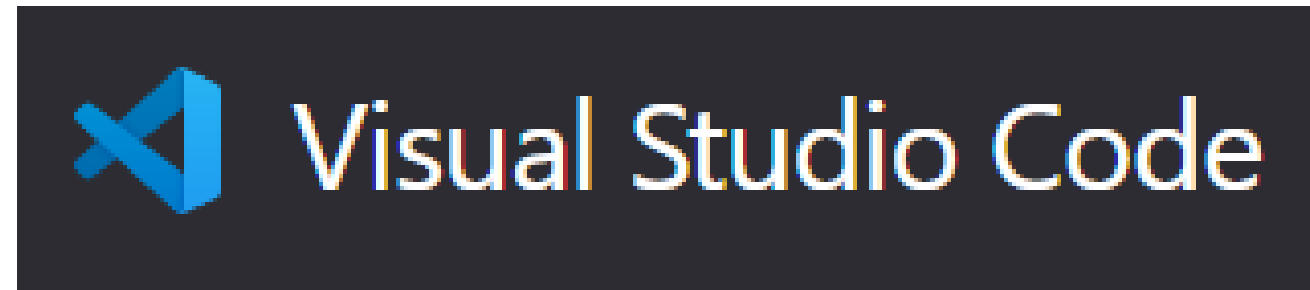


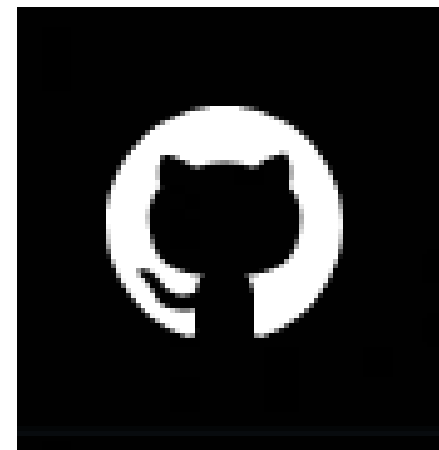
如何透過生成式人工智能設計和 評估算法與程式編程的課業

邱虹虹老師
嶺南衡怡紀念中學

工具

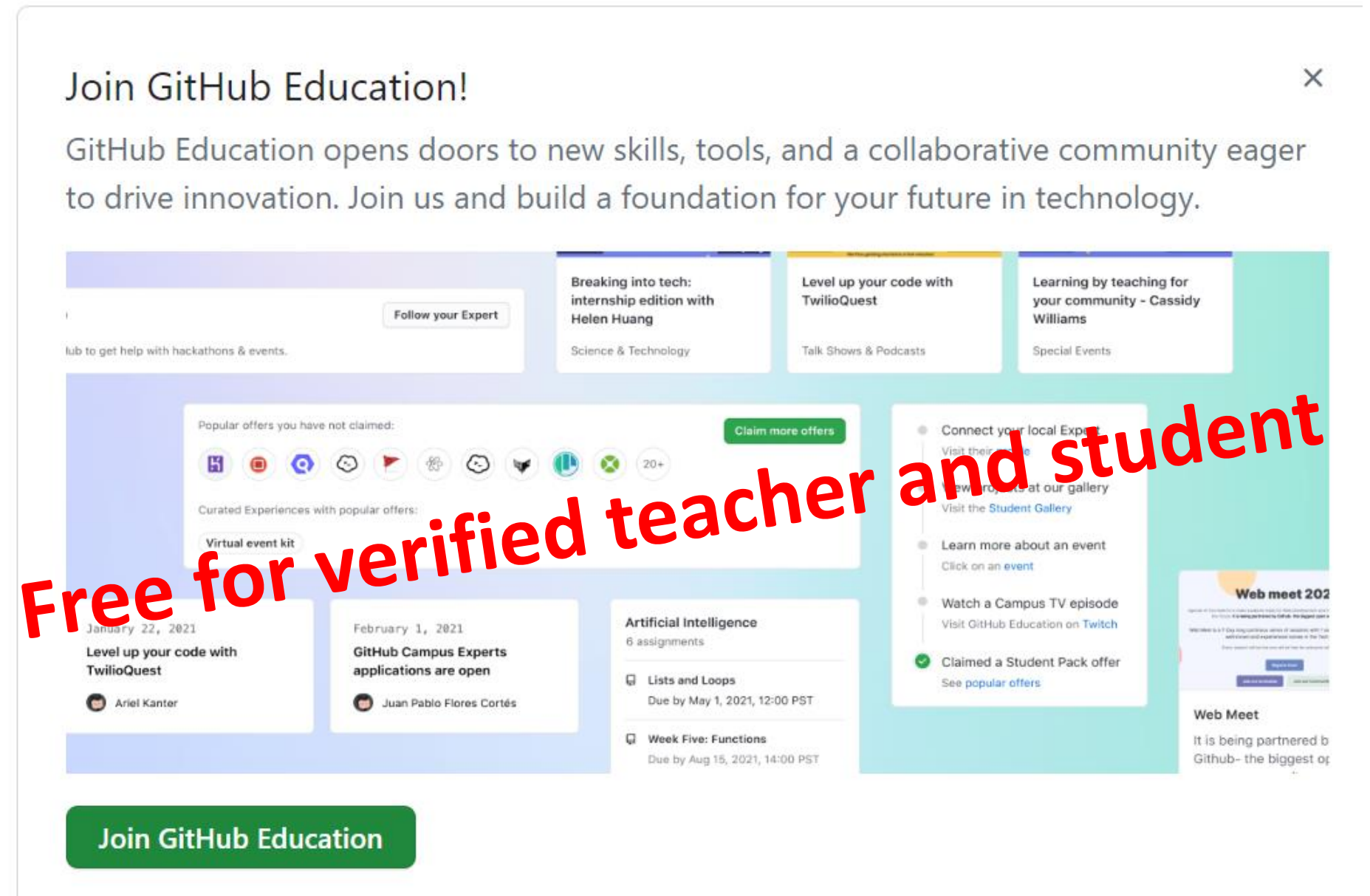


<https://code.visualstudio.com/Download>



GitHub

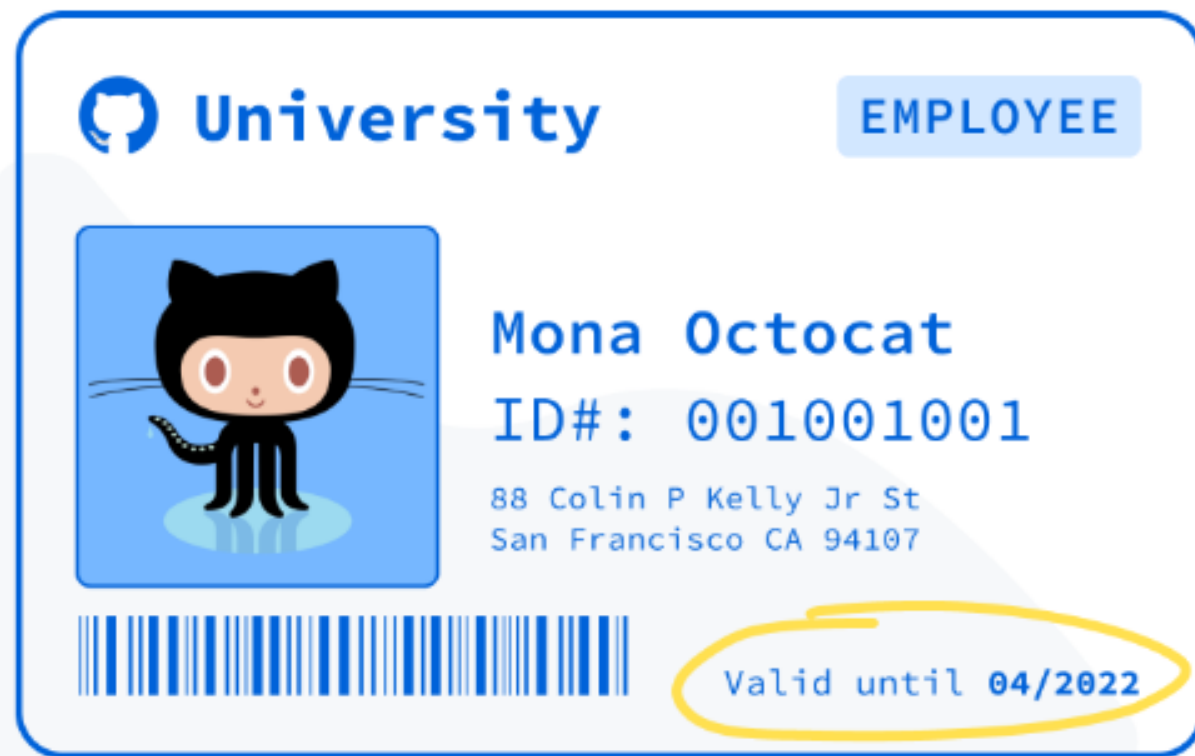
<https://github.com>



https://education.github.com/discount_requests/application

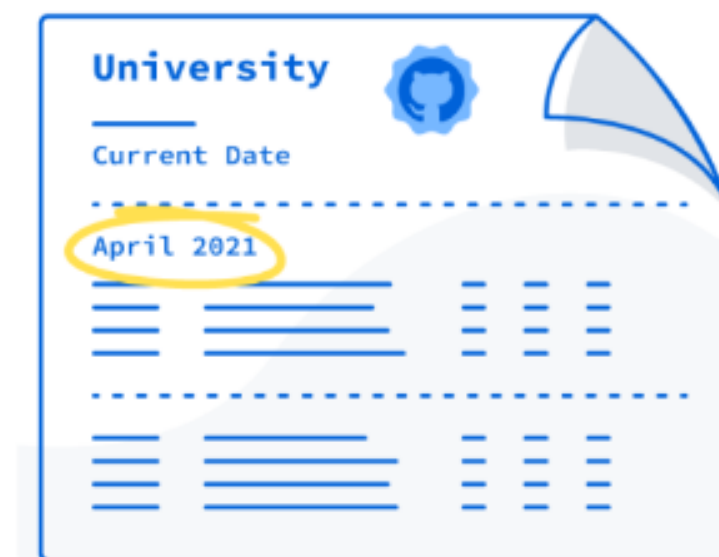
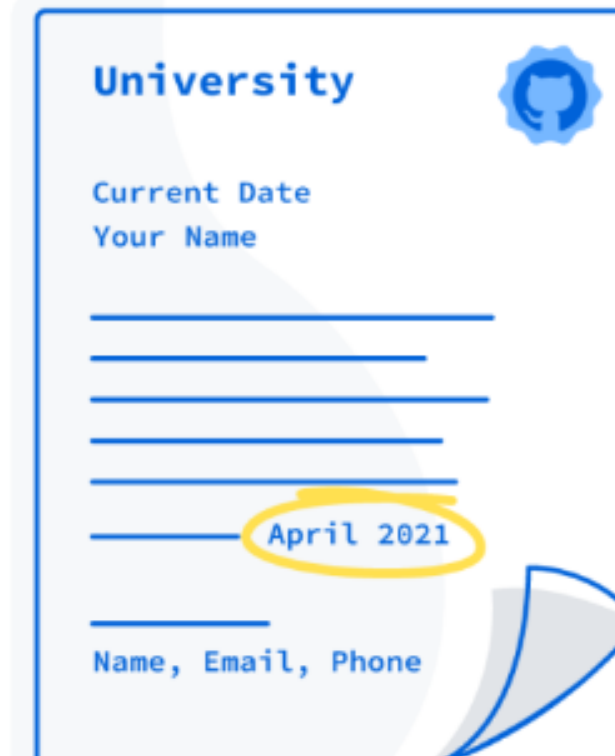
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工具



Your employee ID

Your ID should **include a date** that verifies your current employment. Make sure the image is clear and easy to read; if it looks blurry, please take a new photo and upload it again.



Or another form of proof

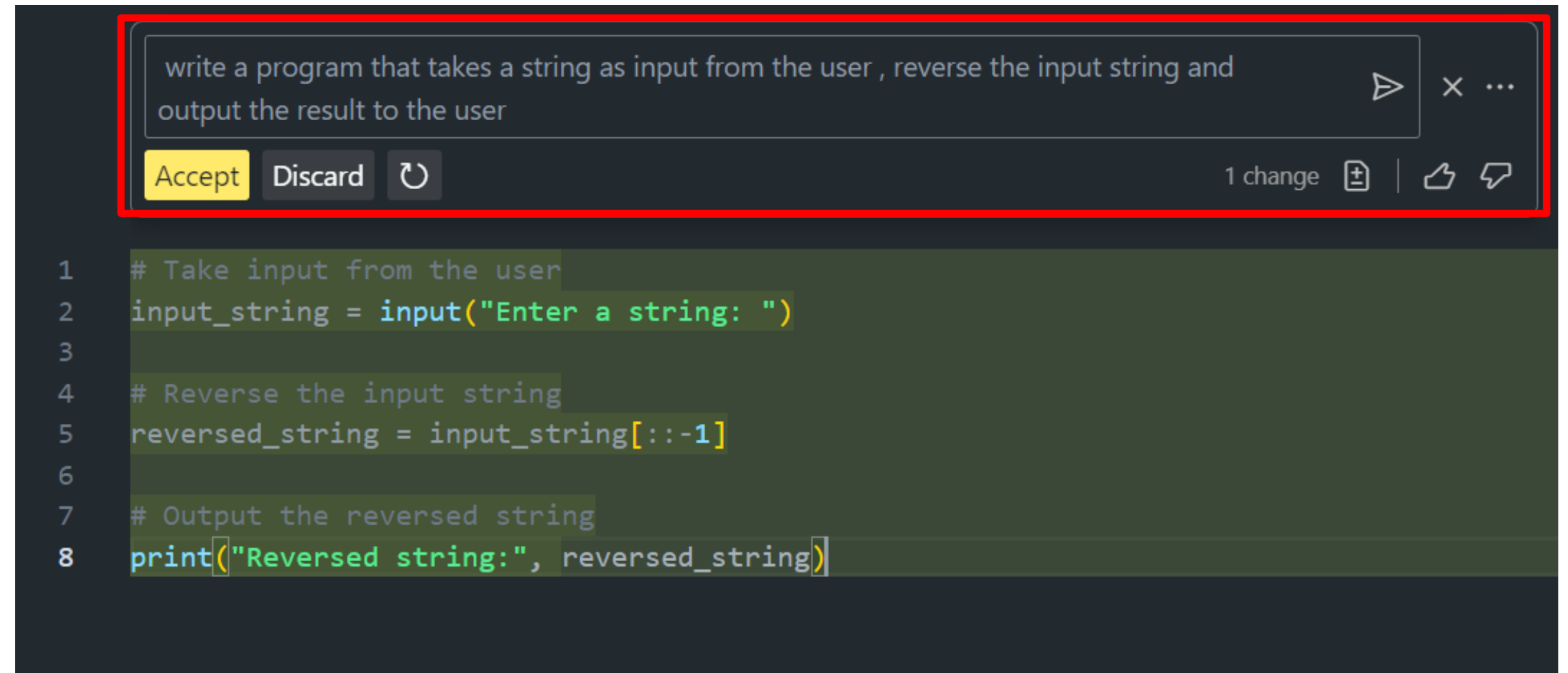
If you don't have an employee ID, or it doesn't include a date, you can upload a letter on school letterhead or any documentation **with a date** that demonstrates your current academic affiliation.

如何利用人工生成器寫上有效的prompt 製作程式課業答案

Prompt 1

write a program that takes a string as input from the user , reverse the input string and output the result to the user.

(program generated is out of textbook)



```
write a program that takes a string as input from the user , reverse the input string and
output the result to the user

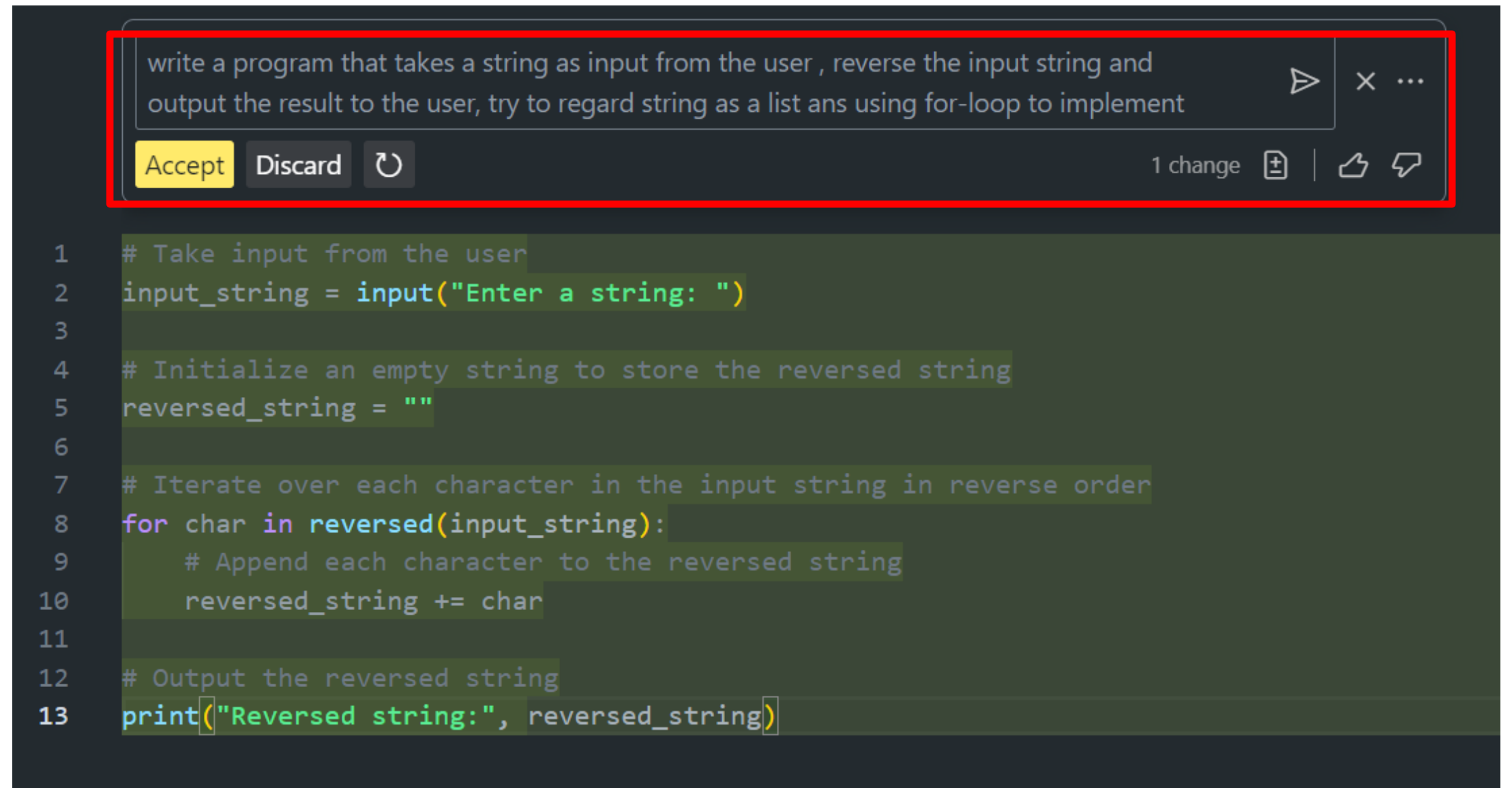
Accept Discard ↺ 1 change | 📄 🗨️
```

```
1 # Take input from the user
2 input_string = input("Enter a string: ")
3
4 # Reverse the input string
5 reversed_string = input_string[::-1]
6
7 # Output the reversed string
8 print("Reversed string:", reversed_string)
```

如何利用人工生成器寫上有效的prompt 製作程式課業答案

Prompt 2

write a program that takes a string as input from the user , reverse the input string and output the result to the user, **try to regard string as a list and using for-loop to implement**



```
write a program that takes a string as input from the user , reverse the input string and
output the result to the user, try to regard string as a list and using for-loop to implement

Accept Discard ↺ 1 change
```

```
1 # Take input from the user
2 input_string = input("Enter a string: ")
3
4 # Initialize an empty string to store the reversed string
5 reversed_string = ""
6
7 # Iterate over each character in the input string in reverse order
8 for char in reversed(input_string):
9     # Append each character to the reversed string
10    reversed_string += char
11
12 # Output the reversed string
13 print("Reversed string:", reversed_string)
```

Please input your number: **0122**
Congratulations!

Please input your number: **1010**
Work hard next year.

題目

- 列表**rank** 收錄了馬拉松比賽中，排名最高的**5**名選手的比賽編號，並將其依名次排列。
- 即在**rank[0]**的選手跑第一，**rank[1]**的選手跑第二，如此類推。
- 大會編寫了一個程式，讓選手自行找出自己是否得獎？左方是這個程式的輸出，粗體文字代表用家的輸入：

學生功課

```
rank=["6012","0122","1122","7201","5402"]
runner_num=input("Please input your number:")
found=False
for i in range(0,5):
    if(rank[i]==runner_num):
        found=True
    else:
        found=False

if found==True:
    print("Congratulation")
else:
    print("Work hard next year!")
```


如何利用人工生成器寫上有效的prompt 製作程式課業答案

Prompt

program display "Congratulations" if the user's input is in the list, otherwise it displays "work hard next year", how come it displays "work hard next year " whatever users input

the program display "Congratulations" if the user input is in the array rank, otherwise it displays "work hard next year", how come it always display "work hard next year" whatever user input.

Accept Discard Changed 11 lines

```
1- rank=["6012","0122","1122","7201"] → 1+ rank = ["6012", "0122", "1122", "7201", "5402"]
2- runner_num=input("Please input your number:") 2+ runner_num = input("Please input your number:")
3- found=False 3+ found = False
4- 4+
5- for i in range(0,5): 5+ for i in range(0, 5):
6-     if(rank[i]==runner_num): 6+     if rank[i] == runner_num:
7-         found=True 7+         found = True
8-     else: 8+         break
9-         found=False 9+
10- 10+
11- if found==True: → 10+ if found:
12-     print("Congraulation") 11+     print("Congratulations")
13- else: 12+ else:
14-     print("Work hard next year") → 13+     print("Work hard next year")
```


學生功課

```
word=input("Please input a word ")
temp=word
length=len(temp)
for i in range (0,length):
    word[i]=temp[length-i-1]
print(word)
```

題目：反轉字串

- 撰寫一個程式，接收使用者輸入一個字串。
- 將輸入的字串反轉，並將結果輸出給使用者。

```
TypeError: 'str' object does not support item assignment
PS C:\Users\YH> & C:/Users/YH/AppData/Local/Microsoft/WindowsApps/python3.11.exe g:/我
Please input a word ABBA
Traceback (most recent call last):
  File "g:\我的雲端硬碟\02_LHYMSS\04_S5_ICT\AI_Github\q1.py", line 5, in <module>
    word[i]=temp[length-i-1]
    ~~~~^^^
TypeError: 'str' object does not support item assignment
PS C:\Users\YH> █
```

prompt: /fix (the program fixed is out of textbook)

```
word = input("Please input a word ")  
reversed_word = ''.join(reversed(word))  
print(reversed_word)
```

prompt: /fix (the program fixed is out of textbook)

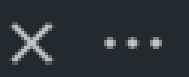
```
reversed_word = word[::-1]  
word = reversed_word  
print(word)
```


prompt: what does word[::-1] means

(out of textbook)

```
1 word=input("Please input a word ")
2 reversed_word = word[::-1]
```

what does word[::-1] means



Using `/explain` to generate response (re-run without)

In Python, the syntax `word[::-1]` is used to reverse a string.

Let's break it down:

- `word` is the variable that stores the input string....



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```
3 print(reversed_word)
```

```
4
```

prompt: /fix without using reverse

```
word = input("Please input a word ")
reversed_word = ""
for i in range(len(word)-1, -1, -1):
    reversed_word += word[i]
print(reversed_word)
```


prompt: /explain the program in Chinese

```
1 word = input("Please input a word ")
2 reversed_word = ""
3 for i in range(len(word)-1, -1, -1):
4     reversed_word += word[i]
```

explain the program in chinese



Using `/explain` to generate response (re-run without)

这个程序是一个简单的单词反转程序。它首先通过输入函数获取用户输入的单词，然后使用一个循环来逆序遍历单词的每个字符，并将每个字符添加到一个新的字符串中。最后，程序打印出逆序后的单词。

在这个程序中，第4行的循环使用了 `range()` 函数来生成一个逆序的索引序列。`range()` 函数接受三个参数：起始值、结束值和步长。在这里，起始值是 `len(word)-1`，即单词的最后一个字符的索引；结束值是 `-1`，表示循环到索引为0的字符；步长是 `-1`，表示逆序遍历。循环体内的代码将每个字符添加到 `reversed_word` 字符串中。...

^

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