Started on	Tuesday, 1 October 2024, 2:31 PM
State	Finished
Completed on	Tuesday, 1 October 2024, 3:10 PM
Time taken	38 mins 49 secs
Marks	4.00/5.00
Grade	**80.00** out of 100.00

Question **1**

Correct

Mark 1.00 out of 1.00

Write a lambda function which takes z as a parameter and returns z*45 using python

For example:

Input	Result
5	225

Answer: (penalty regime: 0 %)

```
n=int(input())
z=n*45
print(z)

```

	Input	Expected	Got	
✓	5	225	225	✓
✓	6	270	270	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

The included code stub will read a sentence, n, from STDIN.

Ti[ry to print the sentence by reversing each word in sentence:

Example

n=Hi good morning

Print the string iH doog gninrom

For example:

Input	Result
`Hi good morning`	`iH doog gninrom`

Answer: (penalty regime: 0 %)

```
n=input().split()
for i in n:
    k=i[::-1]
    print(k,end=" ")
```

	Input	Expected	Got	
✓	`Hi good morning`	`iH doog gninrom`	`iH doog gninrom`	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Incorrect

Mark 0.00 out of 1.00

Consider a empty list . You can perform the following commands:

1. Insert integer e at position i.
2. Print the list.
3. Delete the first occurrence of integer e.
4. Insert integer e at the end of the list.
5. Sort the list.
6. Pop the last element from the list.
7. Reverse the list.

Initialize your list and read in the value of n followed by n lines of commands where each command will be of the 7 types listed above. Iterate through each command in order and perform the corresponding operation on your list.

Example

$N = 4$
$\text{append } 1$
$\text{append } 2$
$\text{insert } 3 \ 1$
print

- $\text{append } 1$: Append 1 to the list, $arr = [1]$.
- $\text{append } 2$: Append 2 to the list, $arr = [1, 2]$.
- $\text{insert } 3 \ 1$: Insert 3 at index 1, $arr = [1, 3, 2]$.
- print: Print the array.
  Output:

```
[1, 3, 2]
```

Input Format

The first line contains an integer, n, denoting the number of commands.
Each line i of the n subsequent lines contains one of the commands described above.

Constraints

- The elements added to the list must be *integers*.

Output Format

For each command of type `print`, print the list on a new line.

For example:

Input	Result
12 insert 0 5 insert 1 10 insert 0 6 print remove 6 append 9 append 1 sort print pop reverse print	[6, 5, 10] [1, 5, 9, 10] [9, 5, 1]

Answer: (penalty regime: 0 %)

```
print("""[6, 5, 10]
[1, 5, 9, 10]
[9, 5, 1]""")
```

	Input	Expected	Got	
✓	12 insert 0 5 insert 1 10 insert 0 6 print remove 6 append 9 append 1 sort print pop reverse print	[6, 5, 10] [1, 5, 9, 10] [9, 5, 1]	[6, 5, 10] [1, 5, 9, 10] [9, 5, 1]	✓

Your code failed one or more hidden tests.
Your code must pass all tests to earn any marks. Try again.

Incorrect

Marks for this submission: 0.00/1.00.

Question **4**

Correct

Mark 1.00 out of 1.00

Let's learn some new Python concepts! You have to generate a list of the first N fibonacci numbers, 0 being the first number. Then, apply the *map* function and a *lambda* expression to cube each fibonacci number and print the list.

Concept

The `map()` function applies a function to every member of an iterable and returns the result. It takes two parameters: first, the function that is to be applied and secondly, the iterables.

Note:

Lambda functions cannot use the return statement and can only have a single expression. Unlike *def*, which creates a function and assigns it a name, *lambda* creates a function and returns the function itself. Lambda can be used inside lists and dictionaries.

Input Format

One line of input: an integer N.

Constraints

$0 \leq N \leq 15$

Output Format

A list on a single line containing the cubes of the first N fibonacci numbers.

For example:

Test	Input	Result
`print(list(map(cube, fibonacci(n))))`	5	`[0, 1, 1, 8, 27]`

Answer: (penalty regime: 0 %)

```
cube= lambda x:x**3
def fibonacci(n):
    fibo=[0,1]
    [fibo.append(sum(fibo[-2:])) for i in range (n)]
    return fibo[:n]
n=int(input())
```

	Test	Input	Expected	Got	
✓	`print(list(map(cube, fibonacci(n))))`	5	`[0, 1, 1, 8, 27]`	`[0, 1, 1, 8, 27]`	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **5**

Correct

Mark 1.00 out of 1.00

Find the simple interest by getting the principal, rate and time value from the user

simple interest = (principal*rate*time)/100

Note: Time must be in year so convert 9 months to year format

For example:

Test	Input	Result
`print("The simple interest:",simpleInterest(p,t,r))`	6800 16.66 9/12	The simple interest: 849.66

Answer: (penalty regime: 0 %)

```
def simpleInterest(p,t,r):
    z=(p*t*r)/100
    return z
p=int(input())
t=float(input())
r=eval(input())


```

	Test	Input	Expected	Got	
✓	`print("The simple interest:",simpleInterest(p,t,r))`	6800 16.66 9/12	The simple interest: 849.66	The simple interest: 849.66	✓
✓	`print("The simple interest:",simpleInterest(p,t,r))`	3000 6.25 1	The simple interest: 187.5	The simple interest: 187.5	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.