

Started on	Tuesday, 8 July 2025, 1:41 PM
State	Finished
Completed on	Tuesday, 8 July 2025, 2:05 PM
Time taken	24 mins 2 secs
Grade	80.00 out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

Write a python program to calculate the length of the given string using recursion

For example:

Test	Input	Result
length(str)	saveetha	length of saveetha is 8
length(str)	engineering	length of engineering is 11

Answer: (penalty regime: 0 %)

```

1 def length(str):
2     if str=="":
3         return 0
4     return 1+length(str[1:])
5 str = input()
6 leng = length(str)
7 print("length of",str,"is",leng)

```

	Test	Input	Expected	Got	
✓	length(str)	saveetha	length of saveetha is 8	length of saveetha is 8	✓
✓	length(str)	engineering	length of engineering is 11	length of engineering is 11	✓
✓	length(str)	Welcome	length of Welcome is 7	length of Welcome is 7	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **2**

Incorrect

Mark 0.00 out of 20.00

Create a Python Function to find the total number of distinct ways to get a change of 'target' from an unlimited supply of coins in set 'S'.

For example:

Test	Input	Result
count(S, len(S) - 1, target)	3 4 1 2 3	The total number of ways to get the desired change is 4

Answer: (penalty regime: 0 %)

Reset answer

```
1 def count(S, n, target):
2
3
4     ##### Add Your Code Here #####
5
6
7
8
9 if __name__ == '__main__':
10     S = [1, 2, 3]
11     n=int(input())
12     target = int(input())
13     for i in range(n):
14         S.append(int(input()))
15     print('The total number of ways to get the desired change is',
16         count(S, len(S) - 1, target))
```

Syntax Error(s)

Sorry: IndentationError: expected an indented block (__tester__.python3, line 9)

Incorrect

Marks for this submission: 0.00/20.00.

Question 3

Correct

Mark 20.00 out of 20.00

Create a python program to find the minimum number of jumps needed to reach end of the array using Dynamic Programming.

For example:

Test	Input	Result
minJumps(arr,n)	6 1 3 6 1 0 9	Minimum number of jumps to reach end is 3

Answer: (penalty regime: 0 %)

Reset answer

```

1 def minJumps(arr, n):
2     jumps = [0 for i in range(n)]
3
4     if (n == 0) or (arr[0] == 0):
5         return float('inf')
6
7     jumps[0] = 0
8     for i in range(1, n):
9         jumps[i] = float('inf')
10        for j in range(i):
11            if (i <= j + arr[j]) and (jumps[j] != float('inf')):
12                jumps[i] = min(jumps[i], jumps[j] + 1)
13                break
14        return jumps[n-1]
15
16 arr = []
17 n = int(input()) #len(arr)
18 for i in range(n):
19     arr.append(int(input()))
20 print('Minimum number of jumps to reach','end is', minJumps(arr,n))

```

	Test	Input	Expected	Got	
✓	minJumps(arr,n)	6 1 3 6 1 0 9	Minimum number of jumps to reach end is 3	Minimum number of jumps to reach end is 3	✓
✓	minJumps(arr,n)	7 2 3 -8 9 5 6 4	Minimum number of jumps to reach end is 3	Minimum number of jumps to reach end is 3	✓

Passed all tests! ✓

Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Create a python Program to find the maximum contiguous sub array using Dynamic Programming.

For example:

Test	Input	Result
maxSubArraySum(a,len(a))	8 -2 -3 4 -1 -2 1 5 -3	Maximum contiguous sum is 7

Answer: (penalty regime: 0 %)

```

1 def maxSubArraySum(a,size):
2     max_till_now = a[0]
3     max_ending = 0
4
5     for i in range(0, size):
6         max_ending = max_ending + a[i]
7         if max_ending < 0:
8             max_ending = 0
9
10
11         elif (max_till_now < max_ending):
12             max_till_now = max_ending
13
14     return max_till_now
15 n=int(input())
16 a =[] #[-2, -3, 4, -1, -2, 1, 5, -3]
17 for i in range(n):
18     a.append(int(input()))
19
20 print("Maximum contiguous sum is", maxSubArraySum(a,n))

```

	Test	Input	Expected	Got	
✓	maxSubArraySum(a,len(a))	8 -2 -3 4 -1 -2 1 5 -3	Maximum contiguous sum is 7	Maximum contiguous sum is 7	✓
✓	maxSubArraySum(a,len(a))	5 1 2 3 -4 -6	Maximum contiguous sum is 6	Maximum contiguous sum is 6	✓

Passed all tests! ✓

Submit

Marks for this submission: 20.00/20.00.

Question **5**

Correct

Mark 20.00 out of 20.00

Write a Python program using A Naive recursive implementation of Minimum Cost Path Problem.

For example:

Input	Result
3	8
3	

Answer: (penalty regime: 0 %)

Reset answer

```

1 R = int(input())
2 C = int(input())
3 import sys
4 def minCost(cost, m, n):
5     if (n < 0 or m < 0):
6         return sys.maxsize
7     elif (m == 0 and n == 0):
8         return cost[m][n]
9     else:
10        return cost[m][n] + min( minCost(cost, m-1, n-1),
11                                minCost(cost, m-1, n),
12                                minCost(cost, m, n-1) )
13
14 def min(x, y, z):
15     if (x < y):
16         return x if (x < z) else z
17     else:
18         return y if (y < z) else z
19 cost= [ [1, 2, 3],
20         [4, 8, 2],
21         [1, 5, 3] ]
22 print(minCost(cost, R-1, C-1))

```

	Input	Expected	Got	
✓	3	8	8	✓
	3			

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.