

<b>Started on</b>	Saturday, 17 May 2025, 9:26 AM
<b>State</b>	Finished
<b>Completed on</b>	Sunday, 18 May 2025, 11:14 AM
<b>Time taken</b>	1 day 1 hour
<b>Overdue</b>	23 hours 48 mins
<b>Grade</b>	<b>80.00</b> out of 100.00

## Question 1

Correct

Mark 20.00 out of 20.00

Create a python program to find Minimum number of jumps to reach end of the array using naive method(recursion)

For example:

Test	Input	Result
minJumps(arr, 0, n-1)	10 1 3 6 3 2 3 6 8 9 5	Minimum number of jumps to reach end is 4

Answer: (penalty regime: 0 %)

Reset answer

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

	Test	Input	Expected	Got	
✓	minJumps(arr, 0, n-1)	10 1 3 6 3 2 3 6 8 9 5	Minimum number of jumps to reach end is 4	Minimum number of jumps to reach end is 4	✓

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

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

## Question 2

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 3	8

Answer: (penalty regime: 0 %)

Reset answer

```

1 R = int(input())
2 C = int(input())
3 import sys
4 def minCost(cost, m, n):
5     ##### Add your Code Here #####
6     if (n < 0 or m < 0):
7         return sys.maxsize
8     elif (m == 0 and n == 0):
9         return cost[m][n]
10    else:
11        return cost[m][n] + min( minCost(cost, m-1, n-1),
12                                minCost(cost, m-1, n),
13                                minCost(cost, m, n-1) )
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 3	8	8	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

## Question 3

Correct

Mark 20.00 out of 20.00

Create a python function to compute the fewest number of coins that we need to make up the amount given.

For example:

Test	Input	Result
ob1.coinChange(s,amt)	3 11 1 2 5	3

Answer: (penalty regime: 0 %)

Reset answer

```

1 class Solution(object):
2     def coinChange(self, coins, amount):
3         ##### Add your Code Here #####
4         dp = [float('inf')] * (amount + 1)
5         dp[0] = 0
6         for coin in coins:
7             for i in range(coin, amount + 1):
8                 dp[i] = min(dp[i], dp[i - coin] + 1)
9         return dp[amount] if dp[amount] != float('inf') else -1
10
11 ob1 = Solution()
12 n = int(input())
13 s = []
14 amt = int(input())
15 for i in range(n):
16     s.append(int(input()))
17
18
19 print(ob1.coinChange(s,amt))

```

	Test	Input	Expected	Got	
✓	ob1.coinChange(s,amt)	3 11 1 2 5	3	3	✓
✓	ob1.coinChange(s,amt)	3 12 1 2 5	3	3	✓
✓	ob1.coinChange(s,amt)	3 22 1 2 5	5	5	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

## Question 4

Not answered

Mark 0.00 out of 20.00

Given an integer array `nums`, find the contiguous subarray (containing at least one number) which has the largest sum and return *its sum*.

A **subarray** is a **contiguous** part of an array.

**Example 1:****Input:** `nums = [-2,1,-3,4,-1,2,1,-5,4]`**Output:** 6**Explanation:** `[4,-1,2,1]` has the largest sum = 6.**For example:**

Test	Input	Result
<code>s.maxSubArray(A)</code>	9 -2 1 -3 4 -1 2 1 -5 4	The sum of contiguous sublist with the largest sum is 6

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 class Solution:
2     def maxSubArray(self,A):
3         ##### Add your Code here
4
5
6 A=[]
7 n=int(input())
8 for i in range(n):
9     A.append(int(input()))
10 s=Solution()
11 print("The sum of contiguous sublist with the largest sum is",s.maxSubArray(A))
12
```

## Question 5

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.