

<b>Started on</b>	Saturday, 3 May 2025, 8:17 AM
<b>State</b>	Finished
<b>Completed on</b>	Saturday, 3 May 2025, 8:50 AM
<b>Time taken</b>	33 mins 11 secs
<b>Grade</b>	<b>80.00</b> out of 100.00

## Question 1

Correct

Mark 20.00 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         res=0
4         mm= -10000
5         for v in A:
6             res+=v
7             mm=max(mm,res)
8         if res<0:
9             res=0
10        return mm
11 A=[]
12 n=int(input())
13 for i in range(n):
14     A.append(int(input()))
15 s=Solution()
16 print("The sum of contiguous sublist with the largest sum is",s.maxSubArray(A))

```

	Test	Input	Expected	Got	
✓	<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	The sum of contiguous sublist with the largest sum is 6	✓

	Test	Input	Expected	Got	
✓	s.maxSubArray(A)	5 5 4 -1 7 8	The sum of contiguous sublist with the largest sum is 23	The sum of contiguous sublist with the largest sum is 23	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

## Question 2

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     return min
14 arr = []
15 n = int(input())
16 for i in range(n):
17     arr.append(int(input()))
18 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! ✓



Marks for this submission: 20.00/20.00.

## Question 3

Correct

Mark 20.00 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     if target == 0:
3         return 1
4     if target < 0 or n < 0:
5         return 0
6     incl = count(S, n, target - S[n])
7     excl = count(S, n - 1, target)
8     return incl + excl
9 if __name__ == '__main__':
10     S = []
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))

```

	Test	Input	Expected	Got	
✓	count(S, len(S) - 1, target)	3 4 1 2 3	The total number of ways to get the desired change is 4	The total number of ways to get the desired change is 4	✓
✓	count(S, len(S) - 1, target)	3 11 1 2 5	The total number of ways to get the desired change is 11	The total number of ways to get the desired change is 11	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.

## Question 4

Incorrect

Mark 0.00 out of 20.00

**SUBSET SUM PROBLEM**

Given a set of positive integers, and a value sum, determine that the sum of the subset of a given set is equal to the given sum.

Write the program for subset sum problem.

**INPUT**

- 1.no of elements
- 2.Input the given elements
- 3.Get the target sum

**OUTPUT**

True , if subset with required sum is found

False , if subset with required sum is not found

For example:

Input	Result
5	4
4	16
16	5
5	23
23	12
12	True,subset found
9	

Answer: (penalty regime: 0 %)

Reset answer

```

1  def SubsetSum(a,i,sum,target,n):
2
3  # Write your code here
4
5
6
7
8
9
10
11
12 a=[]
13 size=int(input())
14 for i in range(size):
15     x=int(input())
16     a.append(x)
17
18 target=int(input())
19 n=len(a)
20 if(SubsetSum(a,0,0,target,n)==True):
21     for i in range(size):
22         print(a[i])

```

**Syntax Error(s)**

Sorry: IndentationError: expected an indented block (\_\_tester\_\_.python3, line 12)

Incorrect

Marks for this submission: 0.00/20.00.

## Question 5

Correct

Mark 20.00 out of 20.00

Write a Python program to Implement Minimum cost path in a Directed Graph

For example:

Test	Result
getMinPathSum(graph, visited, necessary, source, dest, 0);	12

Answer: (penalty regime: 0 %)

Reset answer

```

1 minSum = 1000000000
2 def getMinPathSum(graph, visited, necessary,src, dest, currSum):
3     global minSum
4     if src==dest:
5         flag=True
6         for i in necessary:
7             if not visited[i]:
8                 flag=False
9                 break
10        if flag:
11            minSum=min(minSum,currSum)
12        return
13    for node in graph[src]:
14        if not visited[node[0]]:
15            visited[node[0]]=True
16            getMinPathSum(graph,visited,necessary,node[0],dest,currSum+node[1])
17            visited[node[0]]=False
18    visited[src]=False
19 if __name__=='__main__':
20     graph=dict()
21     graph[0] = [ [ 1, 2 ], [ 2, 3 ], [ 3, 2 ] ];
22     graph[1] = [ [ 4, 4 ], [ 0, 1 ] ];
```

	Test	Expected	Got	
✓	getMinPathSum(graph, visited, necessary, source, dest, 0);	12	12	✓

Passed all tests! ✓

Submit

Marks for this submission: 20.00/20.00.