

Started on	Wednesday, 16 April 2025, 3:05 PM
State	Finished
Completed on	Wednesday, 16 April 2025, 5:44 PM
Time taken	2 hours 39 mins
Overdue	39 mins 28 secs
Grade	80.00 out of 100.00

Question 1

Correct

Mark 20.00 out of 20.00

Print All Paths With Minimum Jumps

1. You are given a number N representing number of elements.
2. You are given N space separated numbers (ELE : elements).
3. Your task is to find & print
 - 3.1) "MINIMUM JUMPS" need from 0th step to (n-1)th step.
 - 3.2) all configurations of "MINIMUM JUMPS".

NOTE: Checkout sample question/solution video inorder to have more insight.

For example:

Test	Input	Result
minJumps(arr)	10	0 -> 3 -> 5 -> 6 -> 9
	3	0 -> 3 -> 5 -> 7 -> 9
	3	
	0	
	2	
	1	
	2	
	4	
	2	
	0	
	0	

Answer: (penalty regime: 0 %)

Reset answer

```

1  from queue import Queue
2  import sys
3  class Pair(object):
4      idx = 0
5      psf = ""
6      jmps = 0
7  def __init__(self, idx, psf, jmps):
8
9      self.idx = idx
10     self.psf = psf
11     self.jmps = jmps
12  def minJumps(arr):
13     ##### Add your Code here.
14     #Start here
15     MAX_VALUE = sys.maxsize
16     dp = [MAX_VALUE for i in range(len(arr))]
17     n = len(dp)
18     dp[n - 1] = 0
19     for i in range(n - 2, -1, -1):
20         steps = arr[i]
21         minimum = MAX_VALUE
22         for j in range(1, steps + 1, 1):

```

	Test	Input	Expected	Got	
✓	minJumps(arr)	10	0 -> 3 -> 5 -> 6 -> 9	0 -> 3 -> 5 -> 6 -> 9	✓
		3	0 -> 3 -> 5 -> 7 -> 9	0 -> 3 -> 5 -> 7 -> 9	
		3			
		0			
		2			
		1			
		2			
		4			
		2			
		0			
		0			

	Test	Input	Expected	Got	
✓	minJumps(arr)	7 5 5 0 3 2 3 6	0 -> 1 -> 6 0 -> 3 -> 6 0 -> 4 -> 6 0 -> 5 -> 6	0 -> 1 -> 6 0 -> 3 -> 6 0 -> 4 -> 6 0 -> 5 -> 6	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.

Question **2**

Incorrect

Mark 0.00 out of 20.00

SUBSET SUM PROBLEM

COUNT OF SUBSETS WITH SUM EQUAL TO X

Given an array `arr[]` of length `N` and an integer `X`, the task is to find the number of subsets with a sum equal to `X`.

Examples:

Input: `arr[] = {1, 2, 3, 3}, X = 6`

Output: 3

All the possible subsets are {1, 2, 3},
{1, 2, 3} and {3, 3}

Input: `arr[] = {1, 1, 1, 1}, X = 1`

Output: 4

THE INPUT

1.No of numbers

2.Get the numbers

3.Sum Value

For example:

Input	Result
4 2 4 5 9 15	1
6 3 34 4 12 3 2 7	2

Answer: (penalty regime: 0 %)

Reset answer

```

1 def subsetSum(arr, n, i, sum, count):
2     #Write your code here
3
4
5
6
7
8
9     arr=[]
10    size=int(input())
11    for j in range(size):
12        value=int(input())
13        arr.append(value)
14    sum = int(input())
15    n = len(arr)
16
17    print(subsetSum(arr, n, 0, sum, 0))

```

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

Write a python program to find the maximum contiguous subarray on the given float array using kadane's algorithm.

For example:

Test	Input	Result
s.maxSubArray(A)	5 -9.6 -3.5 6.3 8.31 9.2	The sum of contiguous sublist with the largest sum is 23.8

Answer: (penalty regime: 0 %)

Reset answer

```

1 class Solution:
2     ##### Add your Code here #####
3     def maxSubArray(self,A):
4         res=0
5         mm= -10000
6         for v in A:
7             res+=v
8             mm=max(mm,res)
9             if res<0:
10                res=0
11        return mm
12 A=[]
13 n=int(input())
14 for i in range(n):
15     A.append(float(input()))
16 s=Solution()
17 print("The sum of contiguous sublist with the largest sum is {:.1f}".format(s.maxSubArray(A)))

```

	Test	Input	Expected	Got	
✓	s.maxSubArray(A)	5 -9.6 -3.5 6.3 8.31 9.2	The sum of contiguous sublist with the largest sum is 23.8	The sum of contiguous sublist with the largest sum is 23.8	✓
✓	s.maxSubArray(A)	7 2.3 6.5 4.6 -7.8 -2.8 -1.6 9.8	The sum of contiguous sublist with the largest sum is 13.4	The sum of contiguous sublist with the largest sum is 13.4	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Create a Dynamic Programming python Implementation of Coin Change Problem.

For example:

Test	Input	Result
count(arr, m, n)	3	4
	4	
	1	
	2	
	3	

Answer: (penalty regime: 0 %)

Reset answer

```

1 def count(S, m, n):
2     table = [[0 for x in range(m)] for x in range(n+1)]
3     for i in range(m):
4         table[0][i] = 1
5     for i in range(1, n+1):
6         for j in range(m):
7             # Count of solutions including S[j]
8             #Start here
9             x = table[i - S[j]][j] if i-S[j] >= 0 else 0
10            # Count of solutions excluding S[j]
11            y = table[i][j-1] if j >= 1 else 0
12            # total count
13            table[i][j] = x + y
14        return table[n][m-1]
15    #End here
16    arr = []
17    m = int(input())
18    n = int(input())
19    for i in range(m):
20        arr.append(int(input()))
21    print(count(arr, m, n))

```

	Test	Input	Expected	Got	
✓	count(arr, m, n)	3	4	4	✓
		4			
		1			
		2			
		3			
✓	count(arr, m, n)	3	20	20	✓
		16			
		1			
		2			
		5			

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 5

Correct

Mark 20.00 out of 20.00

Write a python program to Implement Minimum cost path using Dynamic Programming.

For example:

Input	Result
3 3	8

Answer: (penalty regime: 0 %)

```
1 R = int(input())
2 C = int(input())
3 def minCost(cost, m, n):
4     tc = [[0 for x in range(C)] for x in range(R)]
5     tc[0][0] = cost[0][0]
6     for i in range(1, m+1):
7         tc[i][0] = tc[i-1][0] + cost[i][0]
8     for j in range(1, n+1):
9         tc[0][j] = tc[0][j-1] + cost[0][j]
10    for i in range(1, m+1):
11        for j in range(1, n+1):
12            tc[i][j] = min(tc[i-1][j-1], tc[i-1][j], tc[i][j-1]) + cost[i][j]
13
14    return tc[m][n]
15
16 cost = [[1, 2, 3],
17         [4, 8, 2],
18         [1, 5, 3]]
19 print(minCost(cost, R-1, C-1))
```

	Input	Expected	Got	
✓	3 3	8	8	✓

Passed all tests! ✓



Marks for this submission: 20.00/20.00.