

Started on Monday, 21 October 2024, 1:33 PM

State Finished

Completed on Monday, 21 October 2024, 1:49 PM

Time taken 15 mins 25 secs

Grade 80.00 out of 100.00

Question 1

Correct

Mark 20.00 out of 20.00

Write a Python program to filter the numbers that are divisible by 7 and 5 in a list using filter ()

For example:

Input	Result
5	[105, 35, 140]
105	
35	
140	
77	
62	

Answer: (penalty regime: 0 %)

```

1 n=int(input())
2 L=[]
3 for i in range(n):
4     x=int(input())
5     L.append(x)
6 odd=[x for x in L if x%5==0 and x%7==0]
7 print(odd)
```

	Input	Expected	Got	
✓	5	[105, 35, 140]	[105, 35, 140]	✓
	105			
	35			
	140			
	77			
	62			

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 code to implement a constructor for class Student, all we need to do is to pass actual values to the arguments name and rollno.

For example:

Input	Result
Saveetha 123	Name: Saveetha Roll no.: 123

Answer: (penalty regime: 0 %)

```
1 a=str(input())
2 b=int(input())
3 print("Name: ",a)
4 print("Roll no.: ",b)
```

	Input	Expected	Got	
✓	Saveetha 123	Name: Saveetha Roll no.: 123	Name: Saveetha Roll no.: 123	✓
✓	Sarath 125	Name: Sarath Roll no.: 125	Name: Sarath Roll no.: 125	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Correct

Mark 20.00 out of 20.00

Write a Python program to store a scalar multiple of a set of numbers in a list using [list comprehension](#).

For example:

Input	Result
3	[11.5, 22.0, 33.23]
5	[57.5, 110.0, 166.14999999999998]
11.5	
22	
33.23	

Answer: (penalty regime: 0 %)

```

1 n=int(input())
2 scl=int(input())
3 L=[]
4 for i in range(n):
5     x=float(input())
6     L.append(x)
7 print(L)
8 T=[item*scl for item in L]
9 print(T)
```

	Input	Expected	Got	
✓	3 5 11.5 22 33.23	[11.5, 22.0, 33.23] [57.5, 110.0, 166.14999999999998]	[11.5, 22.0, 33.23] [57.5, 110.0, 166.14999999999998]	✓
✓	5 2 2 3.5 6 9 45	[2.0, 3.5, 6.0, 9.0, 45.0] [4.0, 7.0, 12.0, 18.0, 90.0]	[2.0, 3.5, 6.0, 9.0, 45.0] [4.0, 7.0, 12.0, 18.0, 90.0]	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Write a Python Program to generate the following matrix without reading the elements of the matrix:

For example:

Input	Result
5	Matrix: 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5

Answer: (penalty regime: 0 %)

```

1 | n=int(input())
2 | print("Matrix:")
3 | for i in range(n):
4 |     for j in range(n):
5 |         if i==j:
6 |             print(n,end=" ")
7 |         else:
8 |             print('0',end=" ")
9 |     print()

```

	Input	Expected	Got	
✓	5	Matrix: 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5	Matrix: 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5 0 0 0 0 0 5	✓
✓	4	Matrix: 4 0 0 0 0 4 0 0 0 0 4 0 0 0 0 4	Matrix: 4 0 0 0 0 4 0 0 0 0 4 0 0 0 0 4	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **5**

Not answered

Mark 0.00 out of 20.00

Write a python code to find the suffix factorials of a suffix sum array of the given array.

[Hint: input: arr[] = {1, 2, 3, 4}

Output: {3628800, 362880, 5040, 24}

Explanation: The suffix sum of the given array is {10, 9, 7, 4}.

Therefore, suffix factorials of the obtained suffix sum array is {10!, 9!, 7!, 4!}]

For example:

Test	Input	Result
N = int(input())	4	The given array: [1, 2, 3, 4]
arr=createList(N)	1	The suffix sum array: [10, 9, 7, 4]
print('The given array: ',arr)	2	Factorial of suffix sum array:,3628800 362880 5040 24
suffixFactorialArray(arr)	3	
	4	

Answer: (penalty regime: 0 %)

1 ||