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Training Sessions

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Date	Sep-03-2024	Session No	2A
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Topic : Python Basics - lists, functions basics

Question to try :

Question 1: Write a Python program that prints the square of each number from 1 to 10 using both a for loop and a while loop.

Question 2: Create a Python program that generates a list of cubes (number raised to the power of 3) for the numbers from 0 to 9. Print the resulting list.

Question 3: Write a Python function `any_range(start, stop, step)` that generates a list of numbers starting from start to stop, incrementing by step. Test the function with the following inputs:

`start = 100, stop = 200, step = 7`
`start = 300, stop = 400, step = 10`

Question 4: Write a Python program that generates a list of multiples of 7 starting from 105 up to 200. Print the resulting list.

Question 5: Create a Python program that prints all multiples of 5 between 0 and 100.

```

main.py +
1 #for i in range(1, 11):
2     #print('Square of : ', i, ' is : ', i*i)
3     ''
4     i = 1
5 while i<11:
6     print('Square of : ', i, ' is : ', i*i)
7     i = i+1
8     ''
9
10 #x = 70 % 70
11 #print(x)
12 #abcd = []
13 ''
14 for a in range(10):
15     #print(a*a*a)
16     cube = a*a*a
17     abcd.append(cube)
18     #print(abcd)
19 print(abcd)
20 ''

```

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```

21
22 #100-200, 300-400, 400-500, 600-700, 700-800, .. 1000
23 #1 to 5
24
25 seven = 105
26 list_x = []
27 for i in range(seven, 200, 7):
28     #print(i)
29     list_x.append(i)
30 print(list_x)
31
32 def any_range(start, stop, step):
33     a_list = []
34     for number in range(start, stop, step):
35         a_list.append(number)
36     return a_list
37
38 start = [100, 300, 500, 700, 900]
39 stop = [200, 400, 600, 800, 1000]

```

Ln: 55, Col: 1

```
38 start = [100, 300, 500, 700, 900]
39 stop = [200, 400, 600, 800, 1000]
40
41 num_ele = len(start)
42 print(num_ele)
43
44 call = any_range(100, 200, 7)
45 print(call)
46 '''
47 for x in range(1, num_ele):
48     call = any_range(start[x], stop[x], x+1)
49     print(call)
50 '''
51 number = 5
52 for i in range(0, 100):
53     if i%5==0:
54         print(i)
55
56
57
```

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END