Coding Exercise 4:

1. Create a list with one number, one word and one float value. Display the output of the list.
2. I have a nested list [1,1[1,2]], how to grab the value of 2 from the list.
3. lst=['a','b','c'] What is the result of lst[1:]?
4. Create a dictionary with weekdays an keys and week index numbers as values.do assign dictionary to a variable
5. D={‘k1’:[1,2,3]} what is the output of d[k1][1]
6. Can you create a list [1,[2,3]] into a tuple
7. With a single set function can you turn the word ‘Mississippi’ to distinct character word.
8. Can you add an element ‘X’ to the above created set
9. Output of set([1,1,2,3])

Question:

Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5,between 2000 and 3200 (both included).

The numbers obtained should be printed in a comma-separated sequence on a single line.

Hints:

Consider use range(#begin, #end) method

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Question 2

Level 1

Question:

Write a program which can compute the factorial of a given numbers.

The results should be printed in a comma-separated sequence on a single line.

Suppose the following input is supplied to the program:

8

Then, the output should be:

40320

Hints:

In case of input data being supplied to the question, it should be assumed to be a console input.

Solution:

def fact(x):

if x == 0:

return 1

return x \* fact(x - 1)

x=int(raw\_input())

print fact(x)

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Question 3

Level 1

Question:

With a given integral number n, write a program to generate a dictionary that contains (i, i\*i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary.

Suppose the following input is supplied to the program:

8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

Hints:

In case of input data being supplied to the question, it should be assumed to be a console input.

Consider use dict()

Solution:

n=int(raw\_input())

d=dict()

for i in range(1,n+1):

d[i]=i\*i

print d

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Question 4

Level 1

Question:

Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number.

Suppose the following input is supplied to the program:

34,67,55,33,12,98

Then, the output should be:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

Hints:

In case of input data being supplied to the question, it should be assumed to be a console input.

tuple() method can convert list to tuple

Solution:

values=raw\_input()

l=values.split(",")

t=tuple(l)

print l

print t

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Question 5

Level 1

Question:

Define a class which has at least two methods:

getString: to get a string from console input

printString: to print the string in upper case.

Also please include simple test function to test the class methods.

Hints:

Use \_\_init\_\_ method to construct some parameters

Solution:

class InputOutString(object):

def \_\_init\_\_(self):

self.s = ""

def getString(self):

self.s = raw\_input()

def printString(self):

print self.s.upper()

strObj = InputOutString()

strObj.getString()

strObj.printString()

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