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| Question 1: |
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Define a class with a generator which can iterate the numbers, which are divisible by 7, between a given range 0 and n.

Ans : n = int(input())

divBy7 = [i for i in range(0, n) if (i % 7 == 0)]

print(divBy7)

def divChecker(n):

for i in range(n):

if i % 7 == 0:

value = True

else:

value = False

print(i, value)

divChecker(n)

Question 2:

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| Write a program to compute the frequency of the words from the input. The output should output after sorting the key alphanumerically. |
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| Suppose the following input is supplied to the program: |
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| New to Python or choosing between Python 2 and Python 3? Read Python 2 or Python 3. |
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| Then, the output should be: |
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| 2:2 |
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| 3.:1 |
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| 3?:1 |
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| New:1 |
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| Python:5 |
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| Read:1 |
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| and:1 |
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| between:1 |
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| choosing:1 |
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| or:2 |
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to:1

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| Question 3: |
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Define a class Person and its two child classes: Male and Female. All classes have a method "getGender" which can print "Male" for Male class and "Female" for Female class.

Ans : class Person(object):

def getGender( self ):

return "Unknown"

class Male( Person ):

def getGender( self ):

return "Male"

class Female( Person ):

def getGender( self ):

return "Female"

Question 4:

Please write a program to generate all sentences where subject is in ["I", "You"] and verb is in ["Play", "Love"] and the object is in ["Hockey","Football"].

Ans : subjects = ["I", "You"]

verbs = ["Play", "Love"]

objects = ["Hockey", "Football"]

for i in range(len(subjects)):

for j in range(len(verbs)):

for k in range(len(objects)):

sentence = "%s %s %s." % (subjects[i], verbs[j], objects[k])

print(sentence)

Question 5:

Please write a program to compress and decompress the string "hello world!hello world!hello world!hello world!".

Ans : import zlib

s = 'hello world!hello world!hello world!hello world!'

t = zlib.compress(s)

print t

print zlib.decompress(t)

Question 6:

Please write a binary search function which searches an item in a sorted list. The function should return the index of element to be searched in the list.

Ans : li = [2,4,6,8]

for i in li:

assert i%2==0