PART A

1.

def remove\_duplicates(numbers):

return list(set(numbers))

l=remove\_duplicates([1,2,3,4,5,5,5,6,3,2])

print(l)

2

from collections import Counter

def word\_count(text):

with open(text) as f: #file returns an object every time it is opened so f defines the object

print Counter(f.read().split())

word\_count("text.txt")

3

def longest\_word(text):

with open(text, 'r') as infile:

words = infile.read().split()

max\_len = len(max(words, key=len))

return [word for word in words if len(word) == max\_len] #one line comprehention

print(longest\_word('text.txt'))

4

size=int(input("ENTER THE SIZE OF LIST"))

l=[0]\*size #declare list

for i in range(size):

l[i]=int(input("enter values"))

print(l)

s=[x for x in l if x%2==0] #even

print(s)

l.reverse()

print(l)

5

class student:

name=""

m2=0

m1=0

m3=0

def \_\_init\_\_(self,name,m1,m2,m3): # init constructor

self.name=name

self.m1=m1

self.m2=m2

self.m3=m3

def calc(self):

return(self.m1+self.m2+self.m3)

def display(self):

print "name= ",self.name

print "m1= ",self.m1

print "m2= ",self.m2

print "m3= ",self.m3

n=input("enter name")

m1=int(input("enter marks 1"))

m2=int(input("enter marks 2"))

m3=int(input("enter marks 3"))

s1=student(n,m1,m2,m3)

s1.display()

print "total marks= ",s1.calc()

6

def maximum(l):

if len(l) == 1:

return l[0]

else:

return max(l[0],maximum(l[1:])) #l[1:] is called slicing

list1=[10,30,40]

print(maximum(list1))