Python programming basic assignment 24:

Q1) def amplify(n):

if n>=1:

list = []

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

if i%4 == 0:

list.append(i\*10)

else:

list.append(i)

return list

print(amplify(4))

print(amplify(3))

print(amplify(25))

Q2) def unique(list):

list2 = []

for i in list:

if list.count(i) == 1:

list2.append(i)

return list2

print(unique([3,3,3,7,3,3]))

print(unique([0,0,0.77,0,0]))

print(unique([0,1,1,1,1,1,1,1]))

Q3) class Circle:

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

self.radius = radius

def getArea(self):

area = 3.14159\*(self.radius)\*(self.radius)

print(area)

def getPerimeter(self):

perimeter = 2\*3.14159\*(self.radius)

print(perimeter)

circy = Circle(11)

circy.getArea()

circy2 = Circle(4.44)

circy2.getPerimeter()

Q4) def sort\_by\_length(list1):

s\_list = list(sorted(list1, key = len))

return s\_list

print(sort\_by\_length(["Google","Apple","Microsoft"]))

print(sort\_by\_length([“Leonardo","Michelangelo",

"Raphael","Donatello"]))

print(sort\_by\_length([“Turing","Einstein","Jung"]))

Q5) def triplet(a,b,c):

list2 = [a,b,c]

list2.sort()

if int(list2[0])\*\*2 + int(list2[1])\*\*2 == int(list2[2])\*\*2:

return True

else:

return False

print(triplet(3,4,5))

print(triplet(13,5,12))

print(triplet(1,2,3))