Day-1 Assignment:1 \***Python and data science\***

**1) After running the following code, what does the variable bacon contain?**

    "bacon = 22"

"bacon + 1"

1. 22 is assigned to variable bacon. The bacon + 1 expression does not reassign the value in bacon.

**2) What should the values of the following two terms be?**

    "'spam' + 'spamspam'\n"

"'spam' \* 3\n"

1. The both expressions are value should print “spamspamspam”

**3) How can you tell the difference between break and continue?**

A. **break** statement should stops entire remaining programme and jumps out from a loop while the **continue** statement should stops only executing certain block of condition then it will continue the loop after that condition.

**4) In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?**

A. Every declaration can prints the range from 0 to 10: 0 1 2 3 4 5 6 7 8 9

for i in range(10):

print(I,end=” “)

print(“\n”)

**# output:** 0 1 2 3 4 5 6 7 8 9

for x in range(0,10):

print(x, end=” “)

print(“\n”)

**# output:** 0 1 2 3 4 5 6 7 8 9

for y in range (0,10,1):

print(y, end=” “)

print(\n)

**# output:** 0 1 2 3 4 5 6 7 8 9

1. **Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while loop, create an identical programme that prints the numbers 1 to 10?**
2. **For loop:**

for x in range (1,11)

print(x, end=” “)

**# output:** 1 2 3 4 5 6 7 8 9 10

**While loop:**

i=1

while(i<=10):

print(i,end=” “)

i+=1

**# output**: 1 2 3 4 5 6 7 8 9 10

**6) Given a number x, determine whether the given number is Armstrong number or not.**

A. num=int(input(“Enter a number to check:”))

sum=0

while temp>0:

digit=temp%10

sum +=digit\*\*3

temp%=10

if num==sum:

print(num,”is an Armstrong number”)

else:

print(num,”is not an Armstrong number”)

**#output:** Enter a number: 407

407 is an Armstrong number

**7) Program to find Sum of squares of first n natural numbers.**

A. n=int(input("Enter n value:"))

sum = 0

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

sum = sum + (i \* i)

print("sum of n natural numbers is:",sum)

**#output**: Enter n value:6

sum of n natural numbers is: 91

1. **Program to Reverse words in a given String in Python.**

A. ipt = "Hello Everyone! this is Praveen! I am a python programmer!"

give = ipt.split()

opt = list(reversed(give))

print(" ".join(opt))

**#output:** programmer! Python a am I Praveen! is this Everyone! Hello

1. **Given a list of numbers, write a Python program to find the sum of all the elements in the list.**

A. list= [34,63,33,92,8]

sum=0

for i in list:

sum=sum+i

print(sum)

**#output:** 230

**10) Write a Python program to print all even numbers between 10-1000.**

A. for i in range(10,1001):

if i%2==0:

print(i,end=",")

else:

continue

**#output:** 10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,….,1000