**Python Assignment**

**module 3 (chapter 1)**

**1) Convert Binary number to decimal**

**Ex: 1 0 0 1 0 =1 x 2 5 + 0 x 2 4 + 0 x 2 3 + 1 x 2 2 + 0 x 2 1**

binary = input("Enter number in Binary Format: ")

decimal = int(binary, 2)

print(binary,"in Decimal =",decimal)

**2) Generate first N number of Fibonacci numbers. Take N value from user**

n = int(input('enter the number of series:'))

fib1=0

fib2=1

i=0

while(i < n):

if(i <= 1):

fib3 = i

else:

n = fib1 + fib2

fib1=fib2

fib2 =fib3

print(fib3)

i = i + 1

**3) Display multiplication table of K. Take k value from user**

**Ex: 7 x 1 =7**

**7 x 2 = 14 .....**

n=int(input('enter a value'))

for i in [1,2,3,4,5,6,6,7,8,9,10]:

a=n\*i

print(n,"\*",i,"=",a)

**4) Take 10 integers from keyboard using loop and print their average value on the screen Print the following patterns using loop :**

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lst=[]

a=10

for i in range(0,a):

ele=int(input())

lst.append(ele)

add=sum(lst)

avg=add/a

print("average: ",avg)

n=4

for i in range(n):

for j in range(i):

print("\*",end=" ")

print(" ")

**5) Write a program to find greatest common divisor (GCD) or highest common factor (HCF) of given two numbers**.

def compute\_hcf(x, y):

if x > y:

smaller = y

else:

smaller = x

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

if((x % i == 0) and (y % i == 0)):

hcf = i

return hcf

num1 = int (input("enter a number"))

num2 = int(input("enter another number"))

print("The H.C.F. is", compute\_hcf(num1, num2))

**6) Write a Python program that accepts a word from the user and reverse it**

word = input("Input a word to reverse: ")

for char in range(len(word) - 1, -1, -1):

print(word[char], end="")

print("\n")

**7) Write a Python program to count the number of even and odd numbers from a series of numbers.**

numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)

count\_odd = 0

count\_even = 0

for x in numbers:

if not x % 2:

count\_even+=1

else:

count\_odd+=1

print("Number of even numbers :",count\_even)

print("Number of odd numbers :",count\_odd)

**8) Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.**

for x in range(6):

if (x == 3 or x==6):

continue

print(x,end=' ')

print("\n")