**Assignment – 5**

Q1. Write a Python Program to Find LCM?

Sol.

# Function to return LCM of two numbers

def LCM(a, b):

greater = max(a, b)

smallest = min(a, b)

for i in range(greater, a\*b+1, greater):

if i % smallest == 0:

return i

# Driver program to test above function

if \_\_name\_\_ == '\_\_main\_\_':

a = 10

b = 5

print("LCM of", a, "and", b, "is", LCM(a, b))

Q2. Write a Python Program to Find HCF?

Sol.

# Python program to find H.C.F of two numbers

# define a function

def compute\_hcf(x, y):

# choose the smaller number

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 = 54

num2 = 24

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

Q3. Write a Python Program to Convert Decimal to Binary, Octal and Hexadecimal?

Sol.

# Python program to convert decimal into other number systems

dec = 344

print("The decimal value of", dec, "is:")

print(bin(dec), "in binary.")

print(oct(dec), "in octal.")

print(hex(dec), "in hexadecimal.")

Q4. Write a Python Program To Find ASCII value of a character?

Sol.

# Program to find the ASCII value of the given character

c = 'p'

print("The ASCII value of '" + c + "' is", ord(c))

Q5. Write a Python Program to Make a Simple Calculator with 4 basic mathematical operations?

Sol.

# This function adds two numbers

def add(x, y):

return x + y

# This function subtracts two numbers

def subtract(x, y):

return x - y

# This function multiplies two numbers

def multiply(x, y):

return x \* y

# This function divides two numbers

def divide(x, y):

return x / y

print("Select operation.")

print("1.Add")

print("2.Subtract")

print("3.Multiply")

print("4.Divide")

while True:

# take input from the user

choice = input("Enter choice(1/2/3/4): ")

# check if choice is one of the four options

if choice in ('1', '2', '3', '4'):

try:

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

except ValueError:

print("Invalid input. Please enter a number.")

continue

if choice == '1':

print(num1, "+", num2, "=", add(num1, num2))

elif choice == '2':

print(num1, "-", num2, "=", subtract(num1, num2))

elif choice == '3':

print(num1, "\*", num2, "=", multiply(num1, num2))

elif choice == '4':

print(num1, "/", num2, "=", divide(num1, num2))

# check if user wants another calculation

# break the while loop if answer is no

next\_calculation = input("Let's do next calculation? (yes/no): ")

if next\_calculation == "no":

break

else:

print("Invalid Input")