# Assignment 5 Solutions

#### 1. Write a Python Program to find LCM ?

In [17]:

**def** findTheLcm(x\_term,y\_term):

**if** x\_term **>** y\_term:

greater **=** x\_term

**else**:

greater **=** x\_term

**while** **True**:

**if**((greater**%x\_term** == 0) and (greater%y\_term == 0)):

lcm **=** greater

**break**

**else**:

greater **+=**1

print(f'The LCM of {x\_term},{y\_term} is {lcm}')

findTheLcm(3,6)

findTheLcm(5,2)

findTheLcm(5,100)

The Lcm of 3,6 is 6

The Lcm of 5,2 is 10

The Lcm of 5,100 is 100

#### 2. Write a Python Program to find HCF ?

In [22]:

**def** findTheHcf(x\_term,y\_term):

**if** x\_term**>**y\_term:

smaller **=** y\_term

**else**:

smaller **=** x\_term

**for** ele **in** range(1,smaller**+**1):

**if**((x\_term**%ele** == 0) and (y\_term%ele == 0)):

hcf **=** ele

print(f'The HCF of {x\_term},{y\_term} is {hcf}')

findTheHcf(6,12)

findTheHcf(2,3)

findTheHcf(10,23)

The HCF of 6,12 is 6

The HCF of 2,3 is 1

The HCF of 10,23 is 1

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

In [23]:

**def** DecimalToOther():

num **=** int(input('Enter a Number: '))

print(f'Binary Number -> {bin(num)}')

print(f'Octal Number -> {oct(num)}')

print(f'Hexadecimal Number -> {hex(num)}')

DecimalToOther()

Enter a Number: 55252555

Binary Number -> 0b11010010110001011001001011

Octal Number -> 0o322613113

Hexadecimal Number -> 0x34b164b

#### 4. Write a Python Program to Find the ASCII value of a Character ?

In [15]:

**def** charToAscii():

char **=** input('Enter a Character: ')

**if** len(char) **>** 1:

print('Please Enter a Single Character')

**else**:

print(f'Ascii Character of {char} is {ord(char)}')

charToAscii()

Enter a Character: @

Ascii Character of @ is 64

#### 5. Write a Python Program to Make a Simple Calculator with 4 Basic Mathematical operations ?

In [25]:

**import** operator

ops **=** { "+": operator**.**add, "-": operator**.**sub, "\*":operator**.**mul, "/":operator**.**truediv }

print('Select a Arithmetic Operation: \

\n1.Addition(+)\

\n2.Division(-)\

\n2.Multiplication(\*)\

\n4.Division(/)\

\n3.Stop(0)\n')

**while** **True**:

operator **=** input('Enter a arithmetic operation -> ')

**if** operator **==** '0':

print("Program Stopped successfully")

**break**

**elif** operator **not** **in** ['+','-','\*','/']:

print("Please enter a valid operator")

**else**:

num\_1 **=** int(input('\nEnter 1st Number: '))

num\_2 **=** int(input('Enter 2nd Number: '))

print(f'{num\_1}{operator}{num\_2}={ops[operator](num\_1,num\_2)}\n')

Select a Arithmetic Operation:

1.Addition(+)

2.Division(-)

2.Multiplication(\*)

4.Division(/)

3.Stop(0)

Enter a arithmetic operation -> +

Enter 1st Number: 10

Enter 2nd Number: 20

10+20=30

Enter a arithmetic operation -> -

Enter 1st Number: 10

Enter 2nd Number: 20

10-20=-10

Enter a arithmetic operation -> \*

Enter 1st Number: 10

Enter 2nd Number: 20

10\*20=200

Enter a arithmetic operation -> /

Enter 1st Number: 10

Enter 2nd Number: 20

10/20=0.5

Enter a arithmetic operation -> 0

Program Stopped successfully