1. Write a Python Program to Find LCM?

In [2]:
```
# function to find gcd of two numbers
def gcd(a, b):
    if b == 0:
        return a
    else:
        return gcd(b, a % b)

# function to find lcm of two numbers
def lcm(a, b):
    return (a*b)//gcd(a,b)

# taking input from user
num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))

# printing lcm of two numbers
print("LCM of", num1, "and", num2, "is", lcm(num1, num2))
```

```
Enter first number: 55
Enter second number: 43
LCM of 55 and 43 is 2365
```

2. Write a Python Program to Find HCF?

In [3]:
```
# define a function to calculate HCF
def find_hcf(num1, num2):
    # find the smaller number between the two
    if num1 > num2:
        smaller = num2
    else:
        smaller = num1
    # iterate from 1 to smaller number and check if it divides both the numbers
    for i in range(1, smaller+1):
        if((num1 % i == 0) and (num2 % i == 0)):
            hcf = i
    return hcf

# take input from the user
num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))

# call the function and print the result
print("The HCF of", num1, "and", num2, "is", find_hcf(num1, num2))
```

```
Enter first number: 77
Enter second number: 123
The HCF of 77 and 123 is 1
```

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

In [4]:
```
# Function to convert decimal to binary
def decimal_to_binary(decimal_num):
    binary_num = bin(decimal_num).replace("0b", "")
    return binary_num

# Function to convert decimal to octal
def decimal_to_octal(decimal_num):
    octal_num = oct(decimal_num).replace("0o", "")
    return octal_num

# Function to convert decimal to hexadecimal
def decimal_to_hexadecimal(decimal_num):
    hexadecimal_num = hex(decimal_num).replace("0x", "")
    return hexadecimal_num

# Get decimal number from user
decimal_num = int(input("Enter a decimal number: "))

# Convert to binary, octal, and hexadecimal
binary_num = decimal_to_binary(decimal_num)
octal_num = decimal_to_octal(decimal_num)
hexadecimal_num = decimal_to_hexadecimal(decimal_num)

# Print the results
print("Decimal number:", decimal_num)
print("Binary number:", binary_num)
print("Octal number:", octal_num)
print("Hexadecimal number:", hexadecimal_num)
```

```
Enter a decimal number: 98
Decimal number: 98
Binary number: 1100010
Octal number: 142
Hexadecimal number: 62
```

4 Write a Python Program To Find ASCII value of a character?

In [6]:
```
# take input from the user
char = input("Enter a character: ")

# convert the character to its ASCII value using the ord() function
ascii_value = ord(char)

# print the ASCII value
print(f"The ASCII value of {char} is {ascii_value}")
```

```
Enter a character: A
The ASCII value of A is 65
```

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

In [7]:
```
# define the functions for each operation
def add(x, y):
    return x + y

def subtract(x, y):
    return x - y

def multiply(x, y):
    return x * y

def divide(x, y):
    return x / y

# take input from the user
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

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

num1 = float(input("Enter first number: "))
num2 = float(input("Enter second number: "))

# perform the operation based on user input
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))
else:
    print("Invalid input")
```

```
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice(1/2/3/4): 3
Enter first number: 7
Enter second number: 9
7.0 * 9.0 = 63.0
```

In [ ]: