

Assignment 5 Solutions

1. Write a Python Program to find LCM ?

In [1]:

```
1  # Python Program to find the L.C.M. of two input number
2
3  def compute_lcm(x, y):
4
5      if x > y:
6          greater = x
7      else:
8          greater = y
9
10     while(True):
11         if((greater % x == 0) and (greater % y == 0)):
12             lcm = greater
13
14             break
15         greater += 1
16
17     return lcm
18
19 num1 = 54
20 num2 = 24
21 num3 = 99
22 num4 = 69
23
24 print("The L.C.M. is", compute_lcm(num1, num2), compute_lcm(num3, num4))
```

The L.C.M. is 216 2277

2. Write a Python Program to find HCF ?

In [2]:

```
1 # Python program to find H.C.F of two numbers using while loop
2
3 # taking input from users
4 num1 = int(input("Enter first number: "))
5 num2 = int(input("Enter second number: "))
6
7 i = 1
8 while(i <= num1 and i <= num2):
9     if(num1 % i == 0 and num2 % i == 0):
10         hcf = i
11         i = i + 1
12
13 print("The H.C.F. of", num1,"and", num2,"is", gcd, "".format(num1, num2,hcf))
```

Enter first number: 15

Enter second number: 24

The H.C.F. of 15 and 24 is 3

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

In [3]:

```
1 # Python program to convert decimal into other number systems
2
3 dec = int(input("Enter an integer: "))
4 print("The decimal value of", dec, "is:")
5 print(bin(dec), "in binary.")
6 print(oct(dec), "in octal.")
7 print(hex(dec), "in hexadecimal.")
```

Enter an integer: 1212

The decimal value of 1212 is:

0b10010111100 in binary.

0o2274 in octal.

0x4bc in hexadecimal.

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

In [4]:

```
1 c = input("Enter a Character: ")
2 print("The ASCII value of character " + c + " is", ord(c))
```

Enter a Character: A

The ASCII value of character A is 65

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

In [10]:

```
1  # Python program for simple calculator
2
3  # Function to add two numbers
4  def add(num1, num2):
5      return num1 + num2
6
7  # Function to subtract two numbers
8  def subtract(num1, num2):
9      return num1 - num2
10
11 # Function to multiply two numbers
12 def multiply(num1, num2):
13     return num1 * num2
14
15 # Function to divide two numbers
16 def divide(num1, num2):
17     return num1 / num2
18
19 print("Please select operation -\n" \
20       "1. Add\n" \
21       "2. Subtract\n" \
22       "3. Multiply\n" \
23       "4. Divide\n")
24
25
26 # Take input from the user
27 select = int(input("Select operations form 1, 2, 3, 4 :"))
28
29 number_1 = int(input("Enter first number: "))
30 number_2 = int(input("Enter second number: "))
31
32 if select == 1:
33     print(number_1, "+", number_2, "=",
34           add(number_1, number_2))
35
36
37 elif select == 2:
38     print(number_1, "-", number_2, "=",
39           subtract(number_1, number_2))
40
41 elif select == 3:
42     print(number_1, "*", number_2, "=",
43           multiply(number_1, number_2))
44
45 elif select == 4:
46     print(number_1, "/", number_2, "=",
47           divide(number_1, number_2))
48
49 else:
50     print("Invalid input")
```

Please select operation -

1. Add
2. Subtract
3. Multiply
4. Divide

Select operations form 1, 2, 3, 4 :4

```
Enter first number: 23  
Enter second number: 50  
23 / 50 = 0.46
```

