

1. Write a Python Program to Find LCM?

```
In [27]: 1 def lcm(n):
2         fact=1
3         for i in n:
4             fact=fact*i//gcd(fact,i)
5         return fact
6 def gcd(x,y):
7     while(y):
8         temp=x%y
9         x=y
10        y=temp
11    return x
12
13
14
```

```
In [32]: 1
2 z=int(input('enter no.of numbers'))
3 list1=[]
4 for i in range(0,z):
5     ele=int(input('enter number'))
6     list1.append(ele)
7 print('the lcm of numbers is :',lcm(list1))
8
9
```

```
enter no.of numbers 3
enter number 400
enter number100
enter number50
the lcm of numbers is : 400
```

2. Write a Python Program to Find HCF?

```
In [35]: 1 def hcf(a, b):
2         if(b == 0):
3             return abs(a)
4         else:
5             return hcf(b, a % b)
6
7 print('enter two number')
8 a=int(input('enter '))
9 b=int(input('enter '))
10 print('hcf is : ',hcf(a,b))
```

```
enter two number
enter 80
enter 140
hcf is : 20
```

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

```
In [13]: 1 def binary(n): # decimal to binary
2         list2=[]
3         while(n!=0):
4             list2.append(n%2)
5             n=n//2
6         print('binary conversion of given number is ',list2[::-1])
7
8     def octal(n):
9         list3=[]
10        while(n!=0):
11            list3.append(n%8)
12            n=n//8
13        print('octal conversion of given number is ',list3[::-1])
14    def hexa(n):
15        list4=['0']*100
16        i=0
17        while(n!=0):
18            temp=0
19            temp=n%16
20            if(temp<10):
21                list4[i]=chr(temp+48)
22                i=i+1
23            else:
24                list4[i]=chr(temp+55)
25                i=i+1
26            n=n//16
27
28        j = i - 1
29        print(' hexadecimal conversion of given number is')
30        while(j >= 0):
31            print(list4[j],end='')
32            j = j - 1
33    n=int(input('enter number'))
34    binary(n)
35    octal(n)
36    hexa(n)
```

```
enter number2545
binary conversion of given number is  [1, 0, 0, 1, 1, 1, 1, 1, 0, 0, 0, 1]
octal conversion of given number is  [4, 7, 6, 1]
hexadecimal conversion of given number is
9F1
```

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

```
In [17]: 1 c=input('enter character\n')
2         print(f'the ascii value of {c} is {ord(c)}')
```

```
enter character
r
the ascii value of r is 114
```

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

```
In [20]: 1 def add(x,y):
2         return x+y
3 def subtract(x,y):
4         return x-y
5 def multiply(x,y):
6         return x*y
7 def divide(x,y):
8         return(x/y)
9 n1=int(input("enter number please "))
10 n2=int(input("enter number please "))
11 z=input('enter mathematical operator like divide,add multiply and divide ')
12 if z=='+':
13     print('the sum is : ',add(n1,n2))
14 elif z=='-':
15     print('difference of two number is: ',subtract(n1,n2))
16 elif z=='*':
17     print('multiplication of two number is: ',multiply(n1,n2))
18 elif z=='/':
19     print('division of two number is :',divide(n1,n2))
20 else:
21     print('invalid operator')
```

```
enter number please 45
enter number please 15
enter mathematical operator like divide,add multiply and divide /
division of two number is : 3.0
```

In []:

1

In []:

1