

1. Write a Python Program to Find LCM?

```
In [1]: # define a function to find the GCD (Greatest Common Divisor) of two numbers
def gcd(a, b):
    if b == 0:
        return a
    else:
        return gcd(b, a % b)

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

# prompt the user to enter two numbers
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))

# calculate and print the LCM
print("The LCM of", num1, "and", num2, "is", lcm(num1, num2))
```

```
Enter the first number: 10
Enter the second number: 50
The LCM of 10 and 50 is 50
```

2. Write a Python Program to Find HCF?

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

# prompt the user to enter two numbers
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))

# calculate and print the HCF
print("The HCF of", num1, "and", num2, "is", hcf(num1, num2))
```

```
Enter the first number: 3
Enter the second number: 9
The HCF of 3 and 9 is 3
```

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

```
In [5]: # prompt the user to enter a decimal number
decimal = int(input("Enter a decimal number: "))

# convert to binary, octal and hexadecimal
binary = bin(decimal)
octal = oct(decimal)
hexadecimal = hex(decimal)

# print the results
print("The binary equivalent of", decimal, "is", binary)
print("The octal equivalent of", decimal, "is", octal)
print("The hexadecimal equivalent of", decimal, "is", hexadecimal)
```

Enter a decimal number: 23
The binary equivalent of 23 is 0b10111
The octal equivalent of 23 is 0o27
The hexadecimal equivalent of 23 is 0x17

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

```
In [6]: # prompt the user to enter a character
char = input("Enter a character: ")

# get the ASCII value of the character
ascii_val = ord(char)

# print the result
print("The ASCII value of", char, "is", ascii_val)
```

Enter a character: a
The ASCII value of a is 97

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

```
In [7]: # define functions for the four basic mathematical operations
def add(a, b):
    return a + b

def subtract(a, b):
    return a - b

def multiply(a, b):
    return a * b

def divide(a, b):
    return a / b

# prompt the user to enter two numbers and the operation they want to perform
num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))
operation = input("Enter the operation (+, -, *, /): ")

# perform the selected operation and print the result
if operation == '+':
    result = add(num1, num2)
    print("The result is:", result)
elif operation == '-':
    result = subtract(num1, num2)
    print("The result is:", result)
elif operation == '*':
    result = multiply(num1, num2)
    print("The result is:", result)
elif operation == '/':
    result = divide(num1, num2)
    print("The result is:", result)
else:
    print("Invalid operation.")
```

Enter the first number: 5
Enter the second number: 2
Enter the operation (+, -, *, /): +
The result is: 7.0

In []: