**ADITYA AMIN**

**ASSIGN : 05**

1. Write a Python Program to Find LCM?

def gcd(a, b):

# Function to find the Greatest Common Divisor (GCD) of two numbers

if b == 0:

return a

else:

return gcd(b, a % b)

def lcm(a, b):

# Function to find the Least Common Multiple (LCM) of two numbers

return (a \* b) // gcd(a, b)

# Input two numbers

num1 = int(input("Enter first number: "))

num2 = int(input("Enter second number: "))

# Call the lcm function and print the result

result = lcm(num1, num2)

print("LCM of", num1, "and", num2, "is:", result)

1. Write a Python Program to Find HCF?

def gcd(a, b):

# Function to find the Greatest Common Divisor (GCD) of two numbers

if b == 0:

return a

else:

return gcd(b, a % b)

# Input two numbers

num1 = int(input("Enter first number: "))

num2 = int(input("Enter second number: "))

# Call the gcd function and print the result

result = gcd(num1, num2)

print("HCF/GCD of", num1, "and", num2, "is:", result)

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

def dec\_to\_bin\_oct\_hex(dec):

# Function to convert decimal to binary, octal, and hexadecimal

bin\_num = bin(dec).replace("0b", "") # Convert decimal to binary

oct\_num = oct(dec).replace("0o", "") # Convert decimal to octal

hex\_num = hex(dec).replace("0x", "") # Convert decimal to hexadecimal

return bin\_num, oct\_num, hex\_num

# Input decimal number

dec\_num = int(input("Enter a decimal number: "))

# Call the dec\_to\_bin\_oct\_hex function and print the results

bin\_num, oct\_num, hex\_num = dec\_to\_bin\_oct\_hex(dec\_num)

print("Binary representation:", bin\_num)

print("Octal representation:", oct\_num)

print("Hexadecimal representation:", hex\_num)

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

# Input a character

char = input("Enter a character: ")

# Convert the character to ASCII value

ascii\_value = ord(char)

# Print the ASCII value

print("The ASCII value of", char, "is:", ascii\_value)

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

# Function to add two numbers

def add(a, b):

return a + b

# Function to subtract two numbers

def subtract(a, b):

return a - b

# Function to multiply two numbers

def multiply(a, b):

return a \* b

# Function to divide two numbers

def divide(a, b):

return a / b

# Input two numbers and the operation

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

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

operation = input("Enter operation (+, -, \*, /): ")

# Perform the selected operation

if operation == '+':

result = add(num1, num2)

elif operation == '-':

result = subtract(num1, num2)

elif operation == '\*':

result = multiply(num1, num2)

elif operation == '/':

result = divide(num1, num2)

else:

print("Invalid operation")

exit(1)

# Print the result

print("Result:", result)