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In [1]: #Q1)Write a Python Program to Find LCM?
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In [8]: def LCM(num_1,num_2):
        try:
            #selecting the greater value
            if num_1>num_2:
                greater_value = num_1
                smaller_value = num_2
            else:
                greater_value = num_2
                smaller_value = num_1
            while(True):
                if((greater_value%num_1==0) and (greater_value%num_2==0)):
                    lcm = greater_value
                    break
                greater_value = greater_value+1

            print(f'The LCM of two numbers {num_1} and {num_2} is {lcm}')
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In [9]: #Example1: 10 15
num_1,num_2 = map(int, input("Enter the values \n").split())
LCM(num_1,num_2)

Enter the values
10 15
The LCM of two numbers 10 and 15 is 30
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In [10]: #Example1: 20 50
num_1,num_2 = map(int, input("Enter the values \n").split())
LCM(num_1,num_2)

Enter the values
20 50
The LCM of two numbers 20 and 50 is 100
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In [ ]:
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In [11]: #Q2)Write a Python Program to Find HCF?
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In [13]: def HCF(num_1,num_2):
        try:
            #selecting the greater value
            if(num_1>num_2):
                greater_value = num_1
                smaller_value = num_2
            else:
                greater_value = num_2
                smaller_value = num_1

            for i in range(1,smaller_value+1):
                if((num_1%i==0) and (num_2%i==0)):
                    hcf = i

            print(f'The HCF of two numbers {num_1} and {num_2} is {hcf}')
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In [14]: #Example1: 10 15
num_1,num_2 = map(int, input("Enter the values \n").split())
HCF(num_1,num_2)

Enter the values
10 15
The HCF of two numbers 10 and 15 is 5
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In [59]: #Example1: 20 50
num_1,num_2 = map(int, input("Enter the values \n").split())
HCF(num_1,num_2)

Enter the values
20 50
The HCF of two numbers 20 and 50 is 10
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In [16]: #Q3)Write a Python Program to Convert Decimal to Binary, Octal and Hexadecimal?
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In [36]: def conversion(dec_number):
        try:
            binary = bin(dec_number) #Built in function to convert decimal number into binary
            print(f'The binary equivalent of decimal_number {dec_number} is {binary[2:]}')
            octal = oct(dec_number) #Built in function to convert decimal number into octal
            print(f'The ocatl equivalent of decimal_number {dec_number} is {octal[2:]}')
            hexa_decimal = hex(dec_number) #Built in function to convert binary number into hexa_decimal number
            print(f'The hexa equivalent of decimal_number {dec_number} is {hexa_decimal[2:]}')

            except Exception as e:
                print(e)
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In [39]: #Example 1: 25
dec_number = int(input("Enter the decimal number\n"))
conversion(dec_number)

Enter the decimal number
25
The binary equivalent of decimal_number 25 is 11001
The ocatl equivalent of decimal_number 25 is 31
The hexa equivalent of decimal_number 25 is 19
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In [40]: #Example 1: 255
dec_number = int(input("Enter the decimal number\n"))
conversion(dec_number)

Enter the decimal number
255
The binary equivalent of decimal_number 255 is 11111111
The ocatl equivalent of decimal_number 255 is 377
The hexa equivalent of decimal_number 255 is ff
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In [ ]:
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In [41]: #Q4)Write a Python Program To Find ASCII value of a character?
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In [46]: def ASCII(char):
        try:
            print(f'The ascii value of a given character {char} is {ord(char)}')
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In [48]: #Example 1: 'a'
char = input("Enter a character to find out the ascii value\n")
ASCII(char)

Enter a character to find out the ascii value
a
The ascii value of a given character a is 97
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In [49]: #Example 1: 'A'
char = input("Enter a character to find out the ascii value\n")
ASCII(char)

Enter a character to find out the ascii value
A
The ascii value of a given character A is 65
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In [ ]:
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In [50]: #Q5)Write a Python Program to Make a Simple Calculator with 4 basic mathematical operations?
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In [58]: class Mathematical_operations:
        def __init__(self,num_1,num_2):
            self.num_1 = num_1
            self.num_2 = num_2

            def Addition(self):
                print(f'The addition of two numbers {self.num_1} and {self.num_2} is {self.num_1+self.num_2}')
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In [66]: operation = input("Enetr a mathematical operation{Addition:1,subtraction:2,multiplication:3,divisionn:4}")

Enetr a mathematical operation{Addition:1,subtraction:2,multiplication:3,divisionn:4}1
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In [67]: num_1,num_2 = map(int, input("Enter the values \n").split())
operator = Mathematical_operations(num_1,num_2)

Enter the values
2 3
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In [68]: if operation == '1':
            operator.Addition()

        elif operation == '2':
            operator.subtraction()

        elif operation == '3':
            operator.Multiplication()

        else:
            operator.divison()

The addition of two numbers 2 and 3 is 5
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