1. Write a Python Program to Find LCM?
2. Write a Python Program to Find HCF?
3. Write a Python Program to Convert Decimal to Binary, Octal and Hexadecimal?
4. Write a Python Program To Find ASCII value of a character?
5. Write a Python Program to Make a Simple Calculator with 4 basic mathematical operations?

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BasicProgrammingAssignment5.py

import operator  
  
  
class BasicProgrammingAssignment5():  
 *"""Function to find the LCM of two integer"""* def find\_lcm(self):  
 x, y = map(int, input("Enter two integer numbers separated by space to find their LCM:\n").strip().split())  
 if x > y:  
 greater = x  
 else:  
 greater = y  
 while True:  
 if (greater % x == 0) and (greater % y == 0):  
 lcm = greater  
 break  
 greater += 1  
 print(f"LCM({x},{y}) is {lcm}")  
 print("===============================================================================")  
  
 """Function to find the HCF of two integer"""  
  
 def find\_hcf(self, x, y):  
 if x > y:  
 small = y  
 else:  
 small = x  
 for ele in range(1, small + 1):  
 if ((x % ele == 0) and (y % ele == 0)):  
 hcf = ele  
 print(f"HCF ({x},{y}) is {hcf}")  
 print("===============================================================================")  
  
 """Function to find binary, octal, hexadecimal values of a decimal number"""  
  
 def decimal\_to\_other(self, num):  
 print(f"Binary equivalent of decimal number {num} is {bin(num)}")  
 print(f"Octal equivalent of decimal number {num} is {oct(num)}")  
 print(f"Hexadecimal equivalent of decimal number {num} is {hex(num)}")  
 print("===============================================================================")  
  
 def character\_to\_ascii(self):  
 try:  
 char = input("Enter a character to find its ASCII number:\n")  
 if len(char) > 1:  
 raise Exception("You did not enter single character!!")  
 else:  
 print(f"ASCII number of {char} is {ord(char)}")  
 except Exception as e:  
 print("Exception occurred! \n", e)  
 print("===============================================================================")  
  
 def simple\_calculator(self):  
 operator\_dict = {"+": operator.add, "-": operator.sub, "\*": operator.mul, "/": operator.truediv}  
 print("Calculator Menu: \  
 \nAddition (+)\  
 \nSubtraction (-)\  
 \nMultiplication (\*)\  
 \nDivision (/)\  
 \nQuit (q)\n")  
 count = 3  
 while True:  
 try:  
 operation = input("Enter your choice to act upon from the menu: ")  
 if operation == 'q' or operation == 'Q' or count == 0:  
 print("Exiting!!!")  
 break  
 elif operation not in ['+', '-', '\*', '/']:  
 count -= 1  
 print(f"Invalid operator!\n{count} attempts left!\nPlease input correctly!")  
 else:  
 a = int(input("Enter 1st number: "))  
 b = int(input("Enter 2nd number: "))  
 print(f'{a} {operation} {b} = {operator\_dict[operation](a, b)}\n')  
 except Exception as e:  
 print("Exception Occurred!!! Please input correctly!!!\n", e)  
  
 print("===============================================================================")  
  
  
obj = BasicProgrammingAssignment5()  
  
  
obj.find\_hcf(12, 34)  
obj.find\_hcf(2, 23)  
obj.decimal\_to\_other(100)  
obj.decimal\_to\_other(2)

obj.find\_lcm()  
obj.character\_to\_ascii()  
obj.simple\_calculator()