Q1

def gcd(a, b):

while b:

a, b = b, a % b

return a

def lcm(a, b):

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

Q2

def gcd(a, b):

while b:

a, b = b, a % b

return a

Q3

def decimal\_to\_binary(decimal\_num):

return bin(decimal\_num)[2:]

def decimal\_to\_octal(decimal\_num):

return oct(decimal\_num)[2:]

def decimal\_to\_hexadecimal(decimal\_num):

return hex(decimal\_num)[2:]

Q4

character = input("Enter a character: ")

ascii\_value = ord(character)

print(f"The ASCII value of '{character}' is {ascii\_value}")

Q5

def add(x, y):

return x + y

def subtract(x, y):

return x - y

def multiply(x, y):

return x \* y

def divide(x, y):

if y != 0:

return x / y

else:

return "Cannot divide by zero"

print("Select operation:")

print("1. Add")

print("2. Subtract")

print("3. Multiply")

print("4. Divide")

choice = input("Enter choice (1/2/3/4): ")

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

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

if choice == '1':

print(num1, "+", num2, "=", add(num1, num2))

elif choice == '2':

print(num1, "-", num2, "=", subtract(num1, num2))

elif choice == '3':

print(num1, "\*", num2, "=", multiply(num1, num2))

elif choice == '4':

print(num1, "/", num2, "=", divide(num1, num2))

else:

print("Invalid input")