

```
print("Welcome")
```

```
    Welcome
```

```
2.0+5.0
```

```
    7.0
```

```
max(5,10)
```

```
    10
```

```
n1 = float(input("enter n1:"))
```

```
n2 = float(input("enter n2:"))
```

```
if n1 > n2:
```

```
    print(n1)
```

```
else:
```

```
    print(n2)
```

```
    enter n1:2
```

```
    enter n2:2
```

```
    2.0
```

```
n1 = float(input("enter n1:"))
```

```
if n1 % 2 !=0 :
```

```
    print("odd")
```

```
else:
```

```
    print("not odd")
```

```
    enter n1:2
```

```
    not odd
```

```
def is_prime(n):
```

```
    if n <= 1:
```

```
        return False
```

```
    elif n <= 3:
```

```
        return True
```

```
    elif n % 2 == 0 or n % 3 == 0:
```

```
        return False
```

```
    i = 5
```

```
    while i * i <= n:
```

```
        if n % i == 0 or n % (i + 2) == 0:
```

```
            return False
```

```
        i += 6
```

```
    return True
```

```
primes = [i for i in range(1, 1001) if is_prime(i)]
```

```
print(primes)
```

```
    [2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71
```

```
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):
    return x / y

def modulo(x, y):
    return x % y

print("Select operation:")
print("1. Addition")
print("2. Subtraction")
print("3. Multiplication")
print("4. Division")
print("5. Modulo")

choice = input("Enter choice(1/2/3/4/5): ")

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))
elif choice == '5':
    print(num1, "%", num2, "=", modulo(num1, num2))
else:
    print("Invalid input")

    Select operation:
    1. Addition
    2. Subtraction
    3. Multiplication
    4. Division
    5. Modulo
    Enter choice(1/2/3/4/5): 2
    Enter first number: 3
    Enter second number: 3
    3.0 - 3.0 = 0.0

def gcd(a, b):
    while b:
```

```

        a, b = b, a % b
    return a

def lcm(a, b):
    return a * b // gcd(a, b)

num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))
num3 = int(input("Enter third number: "))

result = lcm(num1, num2)
result = lcm(result, num3)

print("The LCM of", num1, ",", num2, "and", num3, "is", result)
    Enter first number: 120
    Enter second number: 20
    Enter third number: 20
    The LCM of 120 , 20 and 20 is 120

def fibonacci(n):
    if n <= 0:
        return "Invalid input"
    elif n == 1:
        return 0
    elif n == 2:
        return 1
    else:
        return fibonacci(n-1) + fibonacci(n-2)

n = int(input("Enter the number of terms: "))
print("Fibonacci sequence:")
for i in range(1, n+1):
    print(fibonacci(i))
    Enter the number of terms: 2
    Fibonacci sequence:
    0
    1

def is_armstrong(num):
    return num == sum(int(digit) ** len(str(num)) for digit in str(num))

start = int(input("Enter the start of the interval: "))
end = int(input("Enter the end of the interval: "))

armstrong_numbers = [num for num in range(start, end + 1) if is_armstrong(num)]

if armstrong_numbers:
    print("Armstrong numbers in the interval:")
    for num in armstrong_numbers:
        print(num)
else:
    print("No Armstrong numbers found in the interval.")
    Enter the start of the interval: 2

```

```
Enter the start of the interval: 3
Enter the end of the interval: 3
Armstrong numbers in the interval:
3
```

```
def is_pronic(num):
    return num > 0 and ((8 * num + 1) ** 0.5).is_integer()

start = 1
end = 100

pronic_numbers = [num for num in range(start, end + 1) if is_pronic(num)]

if pronic_numbers:
    print("Pronic numbers between 1 and 100:")
    for num in pronic_numbers:
        print(num)
else:
    print("No Pronic numbers found between 1 and 100.")
    Pronic numbers between 1 and 100:
    1
    3
    6
    10
    15
    21
    28
    36
    45
    55
    66
    78
    91
```

