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In [1]: #Labsheet3
#prgm1
#22/08/2022
#input

for possiblePrime in range(2,101):
    isPrime = True
    for num in range(2,possiblePrime):
        if possiblePrime % num ==0:
            isPrime = False

    if isPrime:
        print(possiblePrime)
```

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2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
```

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In [2]: #prgm2
        #input

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
print("Select an operation")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
    choice=input("Enter choice (1/2/3/4):")
    if choice in ('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))
        next_calculation=input("Type quit")
        if next_calculation=="quit":
            break
    else:
        print("Invalid input")

```

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Select an operation
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice (1/2/3/4):1
Enter first number: 10
Enter second number: 20
10.0 + 20.0 = 30.0
Type quitquit

```

```

In [3]: #prgm2
        #input

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
print("Select an operation")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
    choice=input("Enter choice (1/2/3/4):")
    if choice in ('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))
        next_calculation=input("Type quit")
        if next_calculation=="quit":
            break
    else:
        print("Invalid input")

```

```

Select an operation
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice (1/2/3/4):2
Enter first number: 20
Enter second number: 5
20.0 - 5.0 = 15.0
Type quitquit

```

```
In [4]: #prgm2
#input

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
print("Select an operation")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
    choice=input("Enter choice (1/2/3/4):")
    if choice in ('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))
        next_calculation=input("Type quit")
        if next_calculation=="quit":
            break
    else:
        print("Invalid input")
```

```
Select an operation
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice (1/2/3/4):3
Enter first number: 8
Enter second number: 5
8.0 * 5.0 = 40.0
Type quitquit
```

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In [5]: #prgm2
#input

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
print("Select an operation")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
    choice=input("Enter choice (1/2/3/4):")
    if choice in ('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))
        next_calculation=input("Type quit")
        if next_calculation=="quit":
            break
    else:
        print("Invalid input")

```

```

Select an operation
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice (1/2/3/4):4
Enter first number: 50
Enter second number: 3
50.0 / 3.0 = 16.666666666666668
Type quitquit

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In [9]: #prgm3
#input

def factorial (n):
    if n<0:
        return ("Negative number Factorial is Not Exit ")
    elif n==0 or n==1:
        return
    else:
        fact=1
        while(n>1):
            fact*=n
            n-=1
        return(fact)
n=int(input("Value :"))
print("Factorial of",n, "is", factorial(n))
```

Value :3
Factorial of 3 is 6

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In [10]: def factorial (n):
    if n<0:
        return ("Negative number Factorial is Not Exit ")
    elif n==0 or n==1:
        return
    else:
        fact=1
        while(n>1):
            fact*=n
            n-=1
        return(fact)
n=int(input("Value :"))
print("Factorial of",n, "is", factorial(n))
```

Value :5
Factorial of 5 is 120

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In [11]: def factorial (n):
    if n<0:
        return ("Negative number Factorial is Not Exit ")
    elif n==0 or n==1:
        return
    else:
        fact=1
        while(n>1):
            fact*=n
            n-=1
        return(fact)
n=int(input("Value :"))
print("Factorial of",n, "is", factorial(n))
```

Value :10
Factorial of 10 is 3628800

In []: