In [3]:

```
                                        #SURIYA.S
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                                        #LAB EX 3

#Question 1. Create a function prime() that receives an integer and returns whether n is pr
#or not. Print all prime numbers from 1 to 100 by calling prime() function.

def isprime(n):
    for i in range(2,int(n**0.5)+1):
        if n%i==0:
            return False
    return True
n=int(input("enter a num to check : "))
if n>100:
    print("enter below 100")
else:
    print(isprime(n))
for num in range(1,100+1):
    if num > 1:
        for i in range(2, num):
            if (num % i) == 0:
                break
        else:
            print(num)
```

```
enter a num to check : 7
True
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
```

In [1]:

```
#Question 2. Develop a simple arithmetic calculator for 4 operations. The program should
#continue calculation until user types ‘q’ to quit.

def add(x,y):
    return x+y
def sub(x,y):
    return x-y
def mul(x,y):
    return x*y
def div(x,y):
    return x/y
while True:
    ch=input("enter + for Addition - for Subtraction * for Multiplication / for Division q
    if ch=='q':
        break
    else:
        a=int(input("enter 1st number : "))
        b=int(input("enter 2nd number : "))
        if ch=='+':
            print("result=",add(a,b))
        elif ch=='-':
            print("result=",sub(a,b))
        elif ch=='*':
            print("result=",mul(a,b))
        elif ch=='/':
            print("result=",div(a,b))
        else:
            print("invalid operator")
```

```
enter + for Addition - for Subtraction * for Multiplication / for Division
q for quit:+
enter 1st number : 20
enter 2nd number : 10
result= 30
enter + for Addition - for Subtraction * for Multiplication / for Division
q for quit:-
enter 1st number : 20
enter 2nd number : 5
result= 15
enter + for Addition - for Subtraction * for Multiplication / for Division
q for quit:*
enter 1st number : 8
enter 2nd number : 5
result= 40
enter + for Addition - for Subtraction * for Multiplication / for Division
q for quit:/
enter 1st number : 50
enter 2nd number : 3
result= 16.666666666666668
enter + for Addition - for Subtraction * for Multiplication / for Division
q for quit:q
```

In [5]:

```
#Create a function factorial() that takes an integer and returns its factorial value.

def factorial (n):
    if n<0:
        return ('Negative number Factorial is Not Exit ')
    elif n==0 or n==1:
        return 1
    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
```

In [ ]: