even or odd number

In [1]:
```
print("prajwal s e")
num=int(input("enter a number:"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

```
prajwal s e
enter a number:78
num is even
```

positive or negative number

In [2]:
```
print("prajwal s e")
num=int(input("enter an integer:"))
if num>0:
    print("num is positive")
elif num<0:
    print("num is odd")
else:
    print("num is zero")
```

```
prajwal s e
enter an integer:78
num is positive
```

prime number

In [3]:
```
print("prajwal s e")
num=int(input("enter a number:"))
count=0
for i in range(1,num+1):
    if(num%i==0):
        count +=1
if(count==2):
    print("the given number is prime")
else:
    print("the given number is not prime")
```

```
prajwal s e
enter a number:67
the given number is prime
```

pallindrome

In [5]:
```
print("prajwal s e")
num=int(input("enter a number:"))
num_str = str(num)
if num_str == num_str[::-1]:
    print("num is pallindrome")
else:
    print("num is not a pallindrome")
```

```
prajwal s e
enter a number:7897
num is not a pallindrome
```

sum of two numbers

In [6]:
```
print("prajwal s e")
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
prajwal s e
enter a num:67
enter a num:23
90
```

sum of two numbers using function

In [7]:
```
print("prajwal s e")
def calculate_sum(num1,num2):
    return num1+num2
num1=int(input("enter the number:"))
num2=int(input("enter the number:"))
sum=num1+num2
print("sum:",sum)
```

```
prajwal s e
enter the number:78
enter the number:9
sum: 87
```

maximum of two nubers

In [9]:
```
print("prajwal s e")
num1=56
num2=78
result=max(num1,num2)
print("maximum:",result)
```

```
prajwal s e
maximum: 78
```

minimum of two numbers

In [10]:
```
print("prajwal s e")
num1=68
num2=97
result=min(num1,num2)
print("minimum:",result)
```

```
prajwal s e
minimum: 68
```

fibonacci series

In [11]:
```
print("prajwal s e")
num=int(input("enter the fibonacci sequence length:"))
a=0
b=3
print("the fibonacci series of sequence",num,"is;")
print(a,b,end="")
for i in range(2,num):
    c=a+b
    print(c,end="")
    a=b
    b=c
```

```
prajwal s e
enter the fibonacci sequence length:9
the fibonacci series of sequence 9 is;
0 336915243963
```

factorial number

In [12]:
```
print("prajwal s e")
n=int(input("enter the number:"))
f=1
if(n<0):
    print("not possible:")
elif(n==0):
    print("the factorial=1")
else:
    for i in range(1,n+1):
        f=f*i
print("factorial is:",f)
```

```
prajwal s e
enter the number:78
factorial is: 113242811782062978314575211587320462287317495794882519900489628
256688353252342007662450862131773440000000000000000000
```

reverse number

In [14]:
```
print("prajwal s e")
num_str="8756899987"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
prajwal s e
reversed number: 7899986578
```

swapping

In [15]:
```
print("prajwal s e")
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
prajwal s e
a=7
b=9
after swapping:
a: 9
b: 7
```

gcd of two numbers

In [16]:
```
print("prajwal s e ")
import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
prajwal s e
enter a number:87
enter a number:18
result: 3
```

random numbers

In [17]:
```
print("prajwal s e")
import random
number=random.randint(1,10)
guess=0
while guess!=number:
    guess=int(input("guess a number"))
    if guess<number:
        print("guess a higher number")
    elif guess>number:
        print("guess a lower number")
    else:
        print("you guessed the correct number",number)
```

```
prajwal s e
guess a number6
you guessed the correct number 6
```

In [ ]:

In [ ]:

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