even or odd number

In [17]:
```
print("veresh")
num=int(input("enter a number"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

```
veresh
enter a number78
num is even
```

positive or negative number

In [18]:
```
print("veresh")
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")
```

```
veresh
enter an integer:467
num is positive
```

prime number

In [19]:
```
print("veresh")
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")
```

```
veresh
enter a number:56
the given number is not prime
```

pallindrome

In [20]:
```
print("veresh")
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")
```

```
veresh
enter a number:87
num is not a pallindrome
```

sum of two numbers

In [21]:
```
print("veresh")
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
veresh
enter a num:56
enter a num:34
90
```

sum of two numbers using function

In [22]:
```
print("veresh")
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)
```

```
veresh
enter the number:67
enter the number:97
sum: 164
```

maximum of two nubers

In [23]:
```
print("veresh")
num1=52
num2=77
result=max(num1,num2)
print("maximum:",result)
```

```
veresh
maximum: 77
```

minimum of two numbers

In [24]:
```
print("veresh")
num1=45
num2=67
result=min(num1,num2)
print("minimum:",result)
```

```
veresh
minimum: 45
```

fibonacci series

In [25]:
```
print("veresh")
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
```

```
veresh
enter the fibonacci sequence length:12
the fibonacci series of sequence 12 is;
0 336915243963102165267
```

factorial number

In [26]:
```
print("veresh")
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)
```

```
veresh
enter the number:76
factorial is: 1885494701666050254987932260861146558230394535379329335672487982961844043495537923117729972224000000000000000000
```

reverse number

In [27]:
```
print("veresh")
num_str="586558rtyu"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
veresh
reversed number: uytr855685
```

swapping

In [28]:
```
print("veresh")
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
veresh
a=76
b=87
after swapping:
a: 87
b: 76
```

gcd of two numbers

In [29]:
```
print("veresh")
import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
veresh
enter a number:56
enter a number:09
result: 1
```

random numbers

In [30]:
```
print("veresh")
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)
```

```
veresh
guess a number56
guess a lower number
guess a number6
guess a lower number
guess a number3
you guessed the correct number 3
```

In [ ]:

In [ ]:

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In [ ]: