even or odd number

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

```
vijet
enter a number:56
num is even
```

positive or negative number

In [1]:
```
print("vijet")
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")
```

```
vijet
enter an integer:65
num is positive
```

prime number

In [3]:
```
print("vijet")
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")
```

```
vijet
enter a number:43
the given number is prime
```

pallindrome

In [2]:
```
print("vijet")
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")
```

```
vijet
enter a number:54
num is not a pallindrome
```

sum of two numbers

In [4]:
```
print("vijet")
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
vijet
enter a num:34
enter a num:98
132
```

sum of two numbers using function

In [5]:
```
print("vijet")
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)
```

```
vijet
enter the number:79
enter the number:98
sum: 177
```

maximum of two nubers

In [7]:
```
print("vijet")
num1=54
num2=8
result=max(num1,num2)
print("maximum:",result)
```

```
vijet
maximum: 54
```

minimum of two numbers

In [8]:
```
print("vijet")
num1=78
num2=93
result=min(num1,num2)
print("minimum:",result)
```

```
vijet
minimum: 78
```

fibonacci series

In [9]:
```
print("vijet")
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
```

```
vijet
enter the fibonacci sequence length:8
the fibonacci series of sequence 8 is;
0 3369152439
```

factorial number

In [10]:
```
print("vijet")
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)
```

```
vijet
enter the number:67
factorial is: 3647111091818868528824985909660546442716763531404952459370162850026796243694387200000000000000
```

reverse number

In [11]:
```
print("vijet")
num_str="86577657789"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
vijet
reversed number: 98775677568
```

swapping

In [12]:
```
print("vijet")
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
vijet
a=67
b=23
after swapping:
a: 23
b: 67
```

gcd of two numbers

In [13]:
```
print("vijet")
import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
vijet
enter a number:56
enter a number:8
result: 8
```

random numbers

In [14]:
```
print("vijet")
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)
```

```
vijet
guess a number4
guess a higher number
guess a number6
guess a higher number
guess a number8
guess a higher number
guess a number9
you guessed the correct number 9
```

In [ ]:

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