In [3]:
```
 print('vishwa')

num=int(input("enter a number: "))

if num%2==0:
    print("num is even")

else:
    print("num is odd")
```

```
vishwa
enter a number: 8
num is even
```

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

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")
```

```
vishwa
enter an integer:-8
num is odd
```

In [8]:
```
print("vishwa")
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")
```

```
vishwa
enter a number:5
the given number is prime
```

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

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")
```

```
vishwa
enter a number:245
num is not a pallindrome
```

In [11]:
```
print("vishwa")

a=int(input("enter a num: "))
b=int(input("enter a num: "))
sum=a+b
print(sum)
```

```
vishwa
enter a num: 5
enter a num: 7
12
```

In [12]:
```
 print("vishwa")
def calculate_sum(num1, num2):
    return num1+num2

num1=int(input("enter a number: "))
num2=int(input("enter a number: "))
sum=num1+num2
print("sum:",sum)
```

```
vishwa
enter a number: 4
enter a number: 5
sum: 9
```

In [13]:
```
print("vishwa")
num1=3
num2=4
result=max(num1, num2)
print("maximum:", result)
```

```
vishwa
maximum: 4
```

In [15]:
```
print("vishwa")
num1=5
num2=2
result=min(num1, num2)
print("minimum:", result)
```

```
vishwa
minimum: 2
```

In [16]:
```


print("vishwa")
num=int(input("enter the fibonacci sequence length:"))
a=0
b=1
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
```

```
vishwa
enter the fibonacci sequence length:5
the fibonacci series of sequence 5 is;
0 1123
```

In [18]:
```
print("vishwa")
n=int(input("enter a 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*1
print("factorial is:",f)
```

```
vishwa
enter a number: 10
factorial is: 1
```

In [19]:
```
print("vishwa".center(20,'*'))
num_str="12345"
reversed_str=num_str[::-1]
print("reversed number:", reversed_str)
```

```
*******vishwa*******
reversed number: 54321
```

In [20]:
```
print("vishwa")
a=int(input("a="))
a, b=b, a
b=int(input("b="))
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
vishwa
a=4
b=5
after swapping:
a: 3
b: 5
```

In [22]:
```
import math
num1=int(input("enter a number: "))
num2=int(input("enter a number: "))
result=math.gcd(num1, num2)
print("result:", result)
```

```
enter a number: 8
enter a number: 9
result: 1
```

In [ ]:
```

```

In [2]:
```
print("vishwa")
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 correctly", number)
```

```
vishwa
guess a number9
guess a lower number
guess a number2
you guessed the correctly 2
```

In [ ]:
```

```