In [1]:
```
2//3
```

Out[1]:
```
0
```

In [2]:
```
6<<2
```

Out[2]:
```
24
```

In [1]:
```
6&2
```

Out[1]:
```
2
```

In [2]:
```
6|2
```

Out[2]:
```
6
```

In [7]:
```
num=int(input('enter a number'))

if num<0:
    print(num)
elif num==0:
    print(num)
elif num>0:
    print(num)
else :
    ('enter a number')
```

```
enter a number78578
78578
```

In [30]:
```
n=int(input('enter a number'))

for i in range(2,int(n**0.5) + 1):
    if (n%1) == 0:
        print(n,'it is not a prime')

    else :
        print('its a prime number')
```

```
enter a number8
8 it is not a prime
```

In [36]:
```
s = input("Enter a string: ")

if s==s[::-1]:
    print(s, "is a palindrome")
else:
    print(s, "is not a palindrome")
```

```
Enter a string: 6567
6567 is not a palindrome
```

In [44]:
```
import math
import numpy as np
side1 = float(input("Enter the length of side 1: "))
side2 = float(input("Enter the length of side 2: "))
hypotenuse = (side1**2, side2**2)
print("The length of the hypotenuse is",(hypotenuse))
```

```
Enter the length of side 1: 743.37
Enter the length of side 2: 3636.3527
The length of the hypotenuse is (552598.9569, 13223060.958797289)
```

In [46]:
```
hpp=np.sqrt(hypotenuse)
```

In [47]:
```
hpp
```

Out[47]:
```
array([ 743.37  , 3636.3527])
```

In [49]:
```
fq={}
s=input('enter a string')
for char in s:
    if char in fq:
            fq[char] += 1
    else:
            fq[char] = 1
print("The frequency of each character in", s, "is:")
```

```
enter a stringappu
The frequency of each character in appu is:
```

In [50]:
```
for char, count in fq.items():
    print(char, ":", count)
```

```
a : 1
p : 2
u : 1
```

In [ ]: