```
In [1]:
print('hello world')
hello world
In [6]:
a = 10
b=a*20
print(b)
200
In [7]:
num1=2
num2=3
sum=num1+num2
print(sum)
5
In [8]:
num1=input('enter first number')
num2=input('enter second number')
sum=float(num1)+float(num2)
print(sum)
enter first number10
enter second number20
30.0
In [17]:
num=8
num_sqrt=num**0.5
print(num_sqrt)
2.8284271247461903
In [19]:
num=float(input('enter the number'))
num_sqrt=num**0.5
print('the square root of %f is %f'%(num,num_sqrt))
enter the number8
the square root of 8.000000 is 2.828427
```

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In [32]:
import cmath
num=1+2j
num_sqrt=cmath.sqrt(num)
print('the square root of {0} is {1:0.3}+{2:0.3f}j'.format(num,num_sqrt.real,num_sqrt.ima
the square root of (1+2j) is 1.27+0.786j
In [33]:
a=2
b=5
c=2
s=(a+b+c)/2
area=s*(s-a)*(s-b)*(s-c)**0.5
print('the area is %0.3f'%area)
the area is -8.894
In [38]:
a=float(input('enter first number
                                   '))
b=float(input('enter second number '))
c=float(input('enter first number '))
s=(a+b+c)/2
area=s*(s-a)*(s-b)*(s-c)**0.5
print('the area is %0.3f'%area)
enter first number 2
enter second number 5
enter first number
the area is -8.894
In [39]:
import cmath
a=float(input('enter first number '))
b=float(input('enter second number '))
c=float(input('enter first number '))
d=b**2-4*a*c
sol1=(-b-cmath.sqrt(d))/2*a
sol2=(-b+cmath.sqrt(d))/2*a
print('the quadratic equation is {0} and {1}'.format(sol1,sol2))
enter first number 1
enter second number 5
```

enter first number 6

the quadratic equation is (-3+0j) and (-2+0j)

```
In [40]:
x=5
y=10
temp=x
x=y
y=temp
print('the value of x after swaping {}'.format(x))
print('the value of y after swaping {}'.format(y))
the value of x after swaping 10
the value of y after swaping 5
In [45]:
x=5
y=10
x,y=y,x
print("x = ",x)
print("y =",y)
x = 10
y = 5
In [46]:
x=5
y=10
x=x+y
y=x-y
x=x-y
print('the value of x after swaping {}'.format(x))
print('the value of y after swaping {}'.format(y))
the value of x after swaping 10
the value of y after swaping 5
In [47]:
x=5
y=10
x=x*y
y=x/y
x=x/y
print('the value of x after swaping {}'.format(x))
print('the value of y after swaping {}'.format(y))
the value of x after swaping 10.0
the value of y after swaping 5.0
```