

② Swapping

```
x = 25  
y = 'Hyd'  
x, y = y, x  
print(f"x = {x}, y = {y}")
```

③ Largest among 3

```
a = int(input("Enter 1st number : "))  
b = int(input("Enter 2nd number : "))  
c = int(input("Enter 3rd number : "))
```

④ if $a > b$ and $a > c$:

largest = a

elif ~~a > b~~ $b >= a$ and $b >= c$:

largest = b

else :

largest = c

print(f"largest of a, b, c is : {largest}")

a	b	c	
4	5	6	
4 > 5		4 > 6	- false
	4 > 5		- false

④ $<$, $>$, $=$

```
a = int(input("Enter 1st number : "))  
b = int(input("Enter 2nd number : "))
```

if $a > b$:

print('>') # A is > than b

elif

$a < b$:

print('<') # A < than b

else :

print('=') # A = b

5

```
num = int(input("Enter a number: "))
if num > 0:
    print('1')
elif num < 0:
    print('-1')
else:
    print(0)
```

6

```
num = int(input("Enter a number: "))
if num % 2 == 0:
    print("Even")
else:
    print("Odd")
```

7

```
length = float(input("Enter length: "))
breadth = float(input("Enter breadth: "))
area = length * width
perimeter = 2 * (l + b)
```

```
print(f"Area of rect {area}")
```

```
print(f"perimeter of rect {perimeter}")
```

8 ~~import math~~

```
a = input("Enter 1st value: ")
```

```
b = input("Enter 2nd value: ")
```

```
value = a
```

```
a = b
```

```
b = value
```

```
print(f"After swapping {a} = {b}") or a={a} and b={b}
```

a value = a 1 = 2
a = b 2 = 3
b = value 3 = 1

9) `a = input("Enter first value: ")`

`b = input("Enter second value: ")`

`a, b = b, a`

`print(f"After swapping: {a} {b} = {b} {a}")`

① Program:

```
import math
a = int(input("Enter the first number: "))
b = int(input("Enter the second number: "))
sum_ab = a + b
diff_ab = a - b
prod_ab = a * b
quotient_ab = a / b if b != 0 else 10/3  $\frac{3}{10}$   $\rightarrow \frac{3}{10}$   $3 \neq 0$ 
remainder_ab = a % b if b != 0 else undefined
largest = max(a, b)
smallest = min(a, b)
sqrt_a = math.sqrt(a) if a >= 0 else undefined
power_ab = a ** b
gcd_ab = math.gcd(a, b)

print(f"Sum of two numbers : {sum_ab}")
print(f"Sum Diff of two numbers : {diff_ab}")
print(f"Product of two number : {prod_ab}")
print(f"Quotient of two number : {quotient_ab}")
print(f"Remainder of two number : {remainder_ab}")
print(f"Largest of two number : {largest}")
print(f"Smallest of two number : {smallest}")
print(f"Power of two numbers : {power_ab}")
print(f"Gcd of two number : {gcd_ab}")
```

Find output

a = 10.9274

print ('% 8.2 f' % a)

<3 spaces> 10.93

print ('% 9.1 f' % a)

→ # <1 space> 10.92

print ('% 10.3 f' % a) — #

print ('% 2 f' % a) — <8 space>

print ('% 6 f' , % a) — <4 space>

print ('% f' % a) —

%d %i — int
%g %f — float
%s — string

Find outputs

a = [10, 20, 30, 40]

— # [10, 20, 30, 40]

print ('%s' % a)

— # [10, 20, 30, 40]

print ('% s' a)

— # Syntax Error

print ('% s' , % a)

— # Syntax Error

print ('% l' % a)

— # Syntax Error

print (a)

— # [10, 20, 30, 40]

string

↓
format (F) (f)

— Conversion of any python object to 'string'

① F '{object}'

— value of obj

↓
Syntax

② f '{object = }'

— object name = value