

Recap

```
print(5//2)
```

2

```
print(-5//2)
```

-3

```
a = 5
```

```
a = 8
```

```
print(a // 3)
```

2

```
print(bool("abc"))
```

True

```
print("cat" == "dog")
```

False

```
print("cat" == "Cat")
```

False

```
print("cat" == "cat")
```

True

Assignment Operators

- -=

- +=

- /=

- *=

```
marks = int(input())
```

50

```
print(type(marks))
```

<class 'int'>

```
reval = 5
```

```
marks = marks + reval
```

```
print(marks)
```

55

```
a = 5
print(id(a))

140203033553328

print(a)
```

5

```
a = 8
print(a)
print(id(a))

8
140203033553424
```

```
marks = 50

marks += 5 # same as marks = marks + 5

marks
```

55

```
a = 8
a -= 3
print(a)
```

5

```
a = 3
a *= 3
print(a)
```

9

Logical Operators

- and
- or
- not

```
amount = int(input())
```

```
print(amount == 500 or amount == 1000 or amount == 2000)
```

100

False

```
print(25 > 50 or 1 != 2)
```

True

```
25 > 50
```

False

```
1 != 2
```

True

```
print(25 > 50 and 1 != 2)
```

False

Challenge: Pass / Fail

```
marks = int(input("What are the marks"))
```

What are the marks 33

```
print(marks >= 35 and marks <= 100)
```

False

```
print(3 > 1 and -1 < 1)
```

True

```
print(3 > 1)
```

True

```
print(-1 < 1)
```

True

```
print(not True)
```

False

```
print(not False)
```

True

```
print(not 1 == 1)
```

False

Conditional Statements

- A conditional statement is a Boolean expression that, if True, executes a piece of code.

```
weather = input()
```

```
if weather == "rainy":  
    print("Take umbrella")  
    print("Eat Samosa")
```

sunny

```
"rainy" == "rainy"
```

True

```
"sunny" == "rainy"
```

False

```
number = int(input())
```

```
if number > 0:  
    print("Yes this number is positive")
```

-12

There are three types of conditional statements in Python:

- if
- if-else
- if-elif-else

```
# if
```

```
## Make a password validator
```

```
password = input()
```

```
if password == "abc123":  
    print("You are logged in")  
else:  
    print("Invalid Password! try again")
```

```
abc123
```

```
You are logged in
```

```
weather = input()
```

```
if weather == "rainy":  
    print("Take umbrella")  
    print("Eat Samosa")  
else:  
    print("Stay at home")
```

```
rainy
```

```
Take umbrella  
Eat Samosa
```

```
x = 5
```

```
if x == 5:  
    x = 7
```

```
print(x)
```

```
7
```

```
num1 = 10  
num2 = 20  
result = 4000
```

```
if (num1 > 50 or num2 <= 5):
```

```
    result = num1 * num2
else:
    result = num1 + num2
```

```
print(result)
```

```
30
```

```
print(result)
```

```
30
```

```
## num1 and num2. Find max?
```

```
num1 = int(input("Num1:"))
num2 = int(input("Num2: "))
```

```
if num1 > num2:
    print("Number 1 is greater", num1)
else:
    print("Number 2 is greater", num2)
```

```
Num1: 5
```

```
Num2: 5
```

```
Number 2 is greater 5
```

```
# slack: rahul janghu
```

```
n = input("Give the input:")
```

```
Give the input: Rahul
```

```
a = "Rahul"
b = "Shriram"
```

```
# string concatenation
print(a + "says hi to" + b)
```

```
Rahulsays hi toShriram
```

```
# Simple print function
print(a, "says hi to", b)
```

Rahul says hi to Shriram