L2
Introduction to [lang]

Writing our first program

Java → OOPs → class
                → object

class Main
{
→
→
→
}

Rule 1 → class

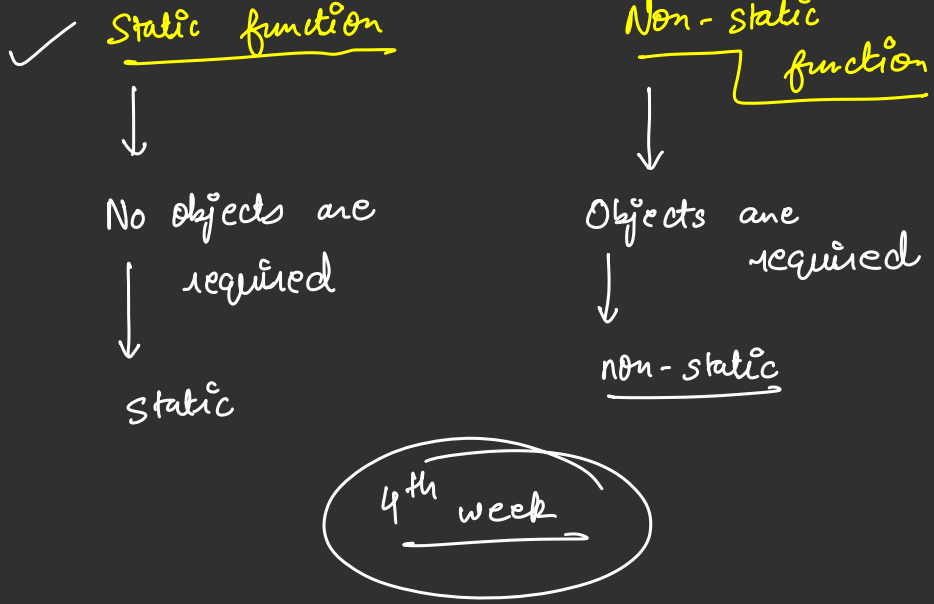
Main.java

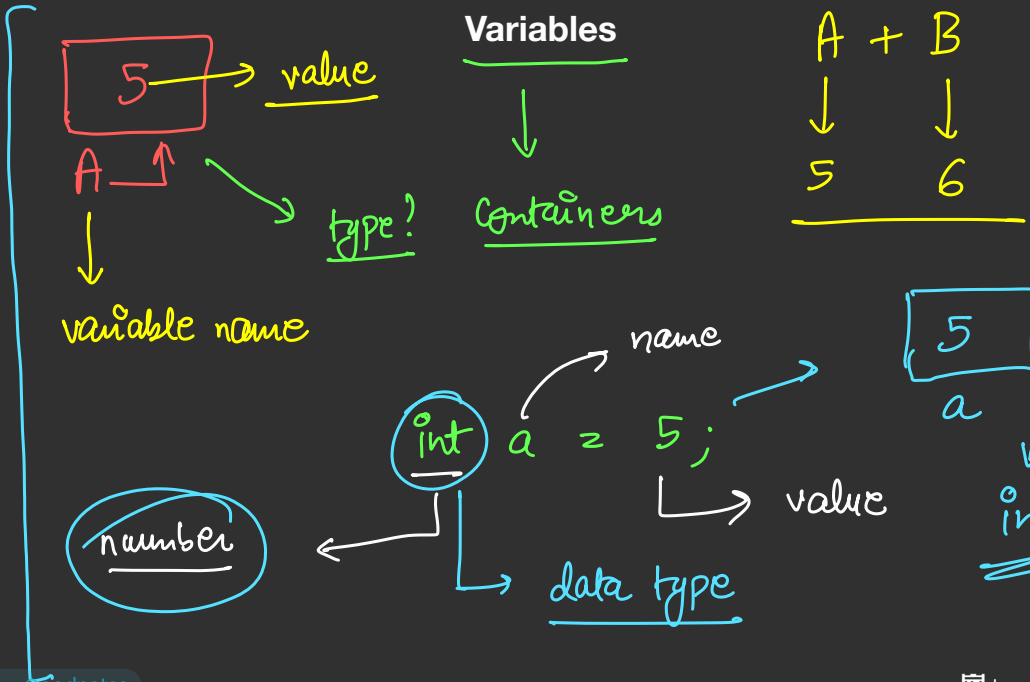
Sakshan.java

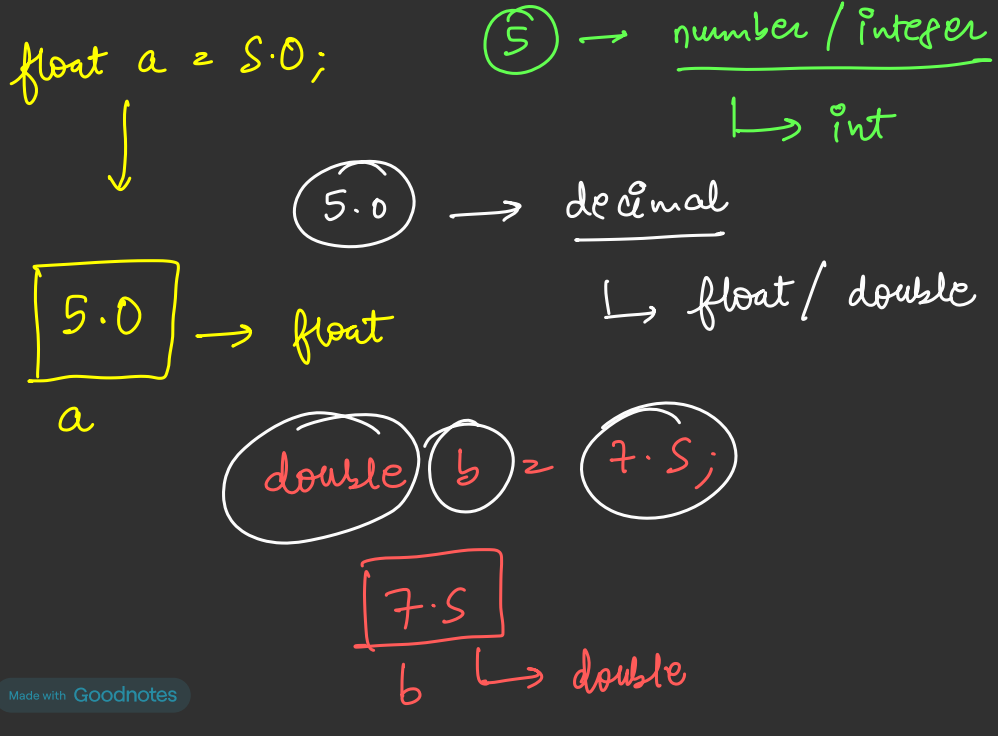
```
public class Main
{
    public static void main (String args[])
    {
        System.out.print ("Hello");
        System.out.println ("World");
    }
}
```

HelloWorld

word
google







Data types

int ← 5 (b)

int → 4 bytes

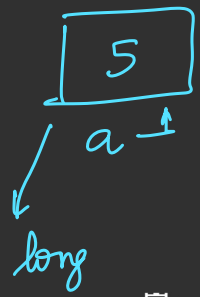
→ $-2 * 10^9$ to $2 * 10^9$

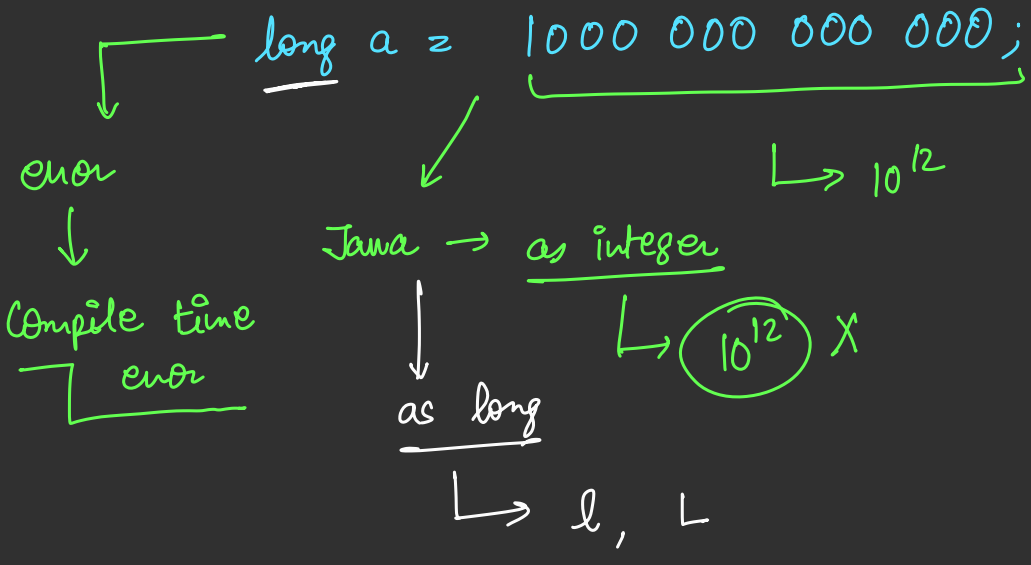
→ -ve, +ve

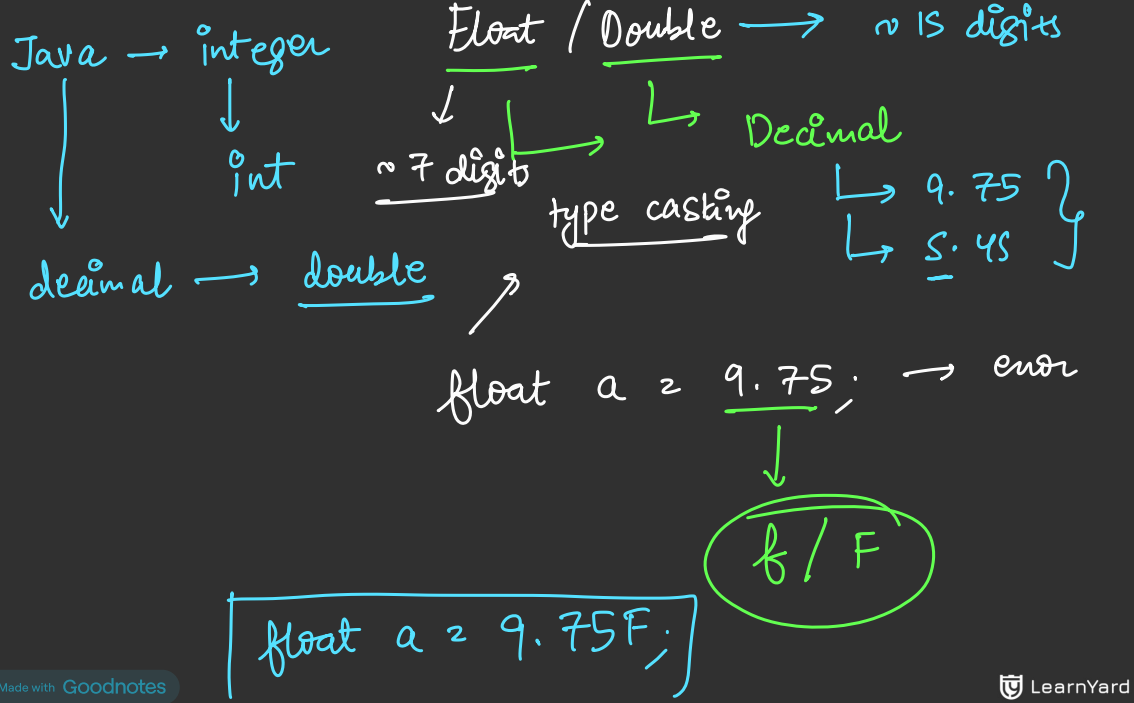
```
int b = 5;
long a = 5;
```

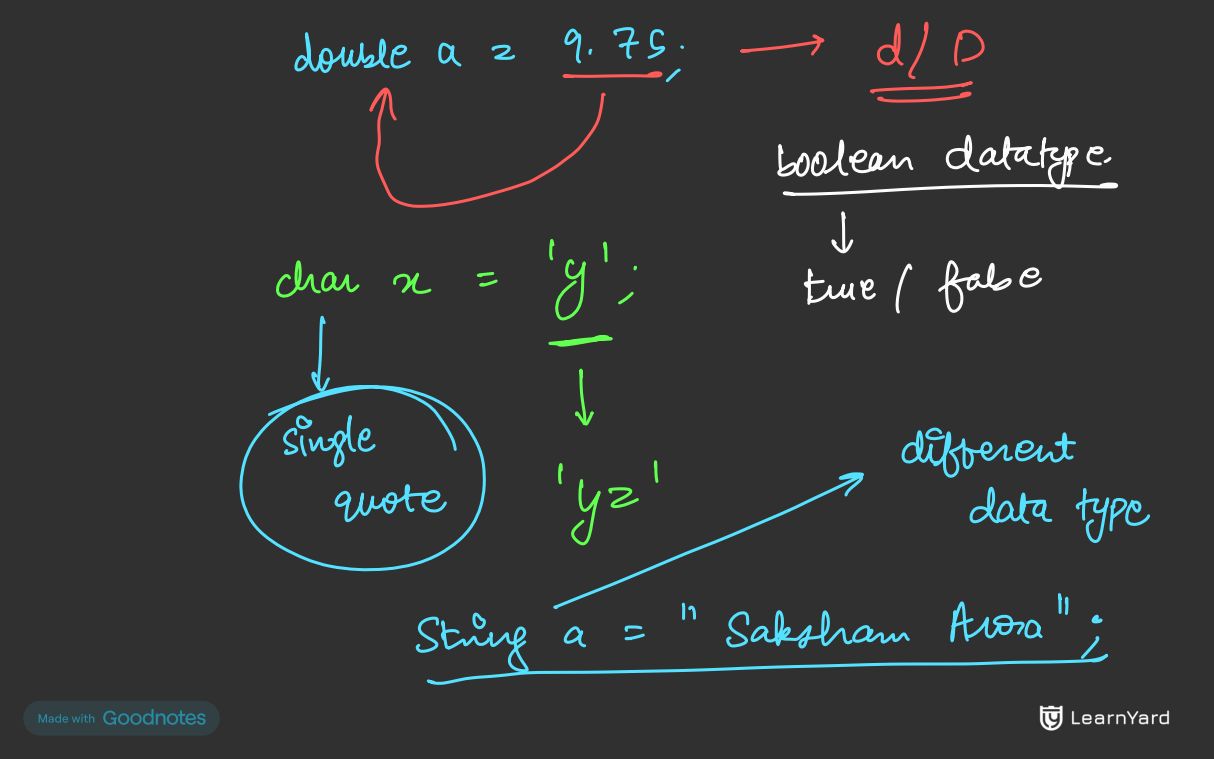
long → 8 bytes

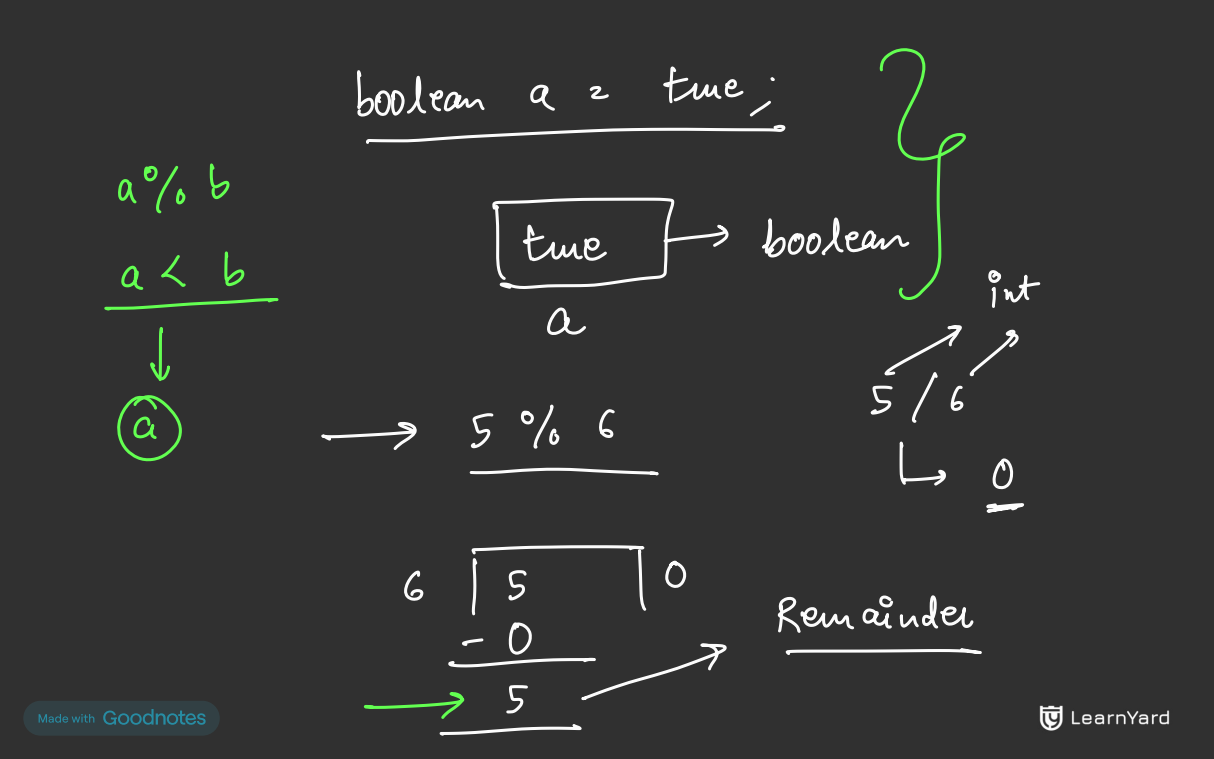
→ $-2 * 10^{18}$ to $2 * 10^{18}$











Operators

Arithmetic Operator & Assignment Operator

+, -, *, /, %

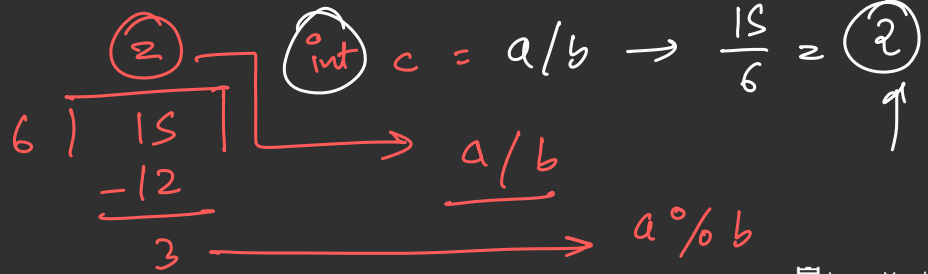
int a = 15;

int b = 6;

% → Remainder

int a = 5;

double b = 5.5;



Operators

Relational and Logical Operator

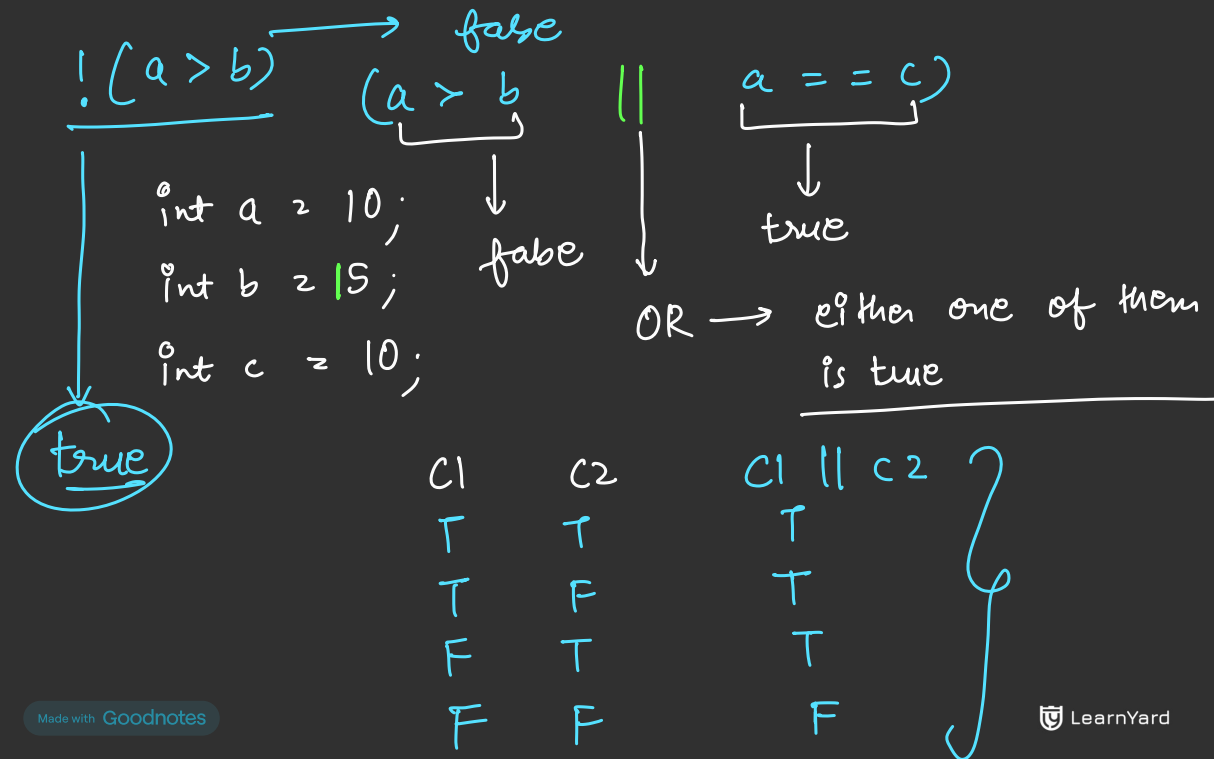
a = 5
b = 6

boolean

a < b → true
a > b → false
a <= b → true
a >= b → false
a == b → false
a != b → true

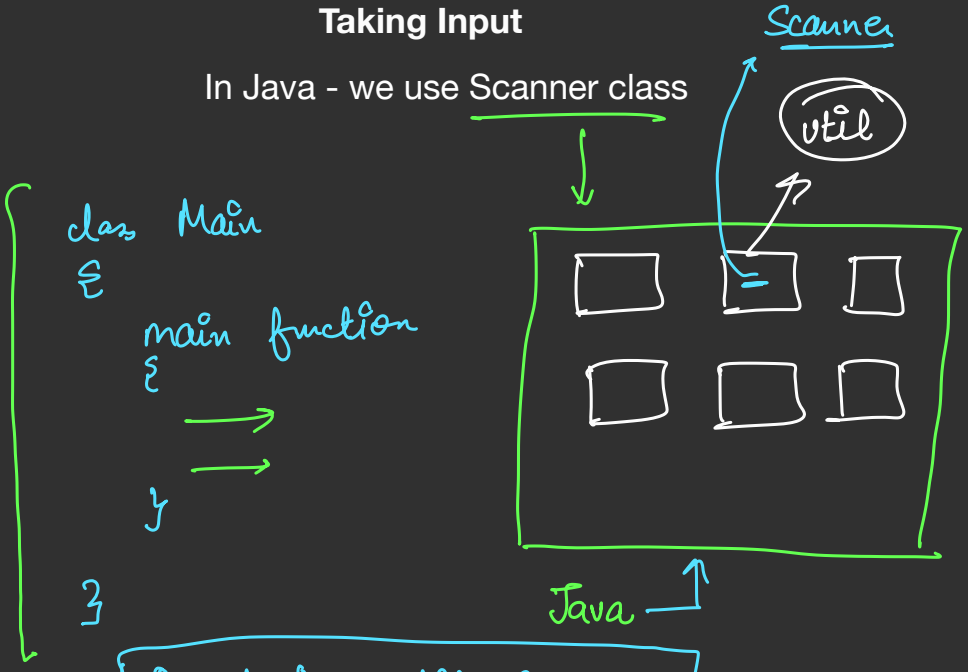
5 < 5
↓
false

5 <= 5
↓
true


!(a > b)
false
(a > b
||
a == c)
int a = 10;
int b = 15;
int c = 10;
false
true
OR → either one of them is true
true
C1 C2 C1 || C2
T T T
T F T
F T T
F F F
Made with Goodnotes
LearnYard

Taking Input

In Java - we use Scanner class



2) Object creation

↳ Scanner in = new Scanner(System.in);

3) Functions

↳ in.nextInt()

int a = in.nextInt();

in.nextLong();

in.nextFloat();
in.nextDouble(); → Decimal

in.next(); → word

in.nextLine() → sentence

in.nextBoolean() → true / false

Type Casting

Bigger → Smaller

Implicit Type Casting

By default

```
int a = 10;
long b = a;
```

smaller → bigger

Explicit Type Casting

```
long a = 10;
int b = a;
```

↓

```
int b = (int) a;
```

Homework Question

1. Enter two numbers and perform all arithmetic operations
2. Enter P, R, T and calculate simple interest.

Next Class Plan

1. Conditional Statements
2. Loops
3. Some Practice

Thank You!

Reminder: Going to the gym & observing the trainer work out can help you know the right technique, but you'll muscle up only if you lift some weights yourself.

So, PRACTICE, PRACTICE, PRACTICE!