Today's agenda

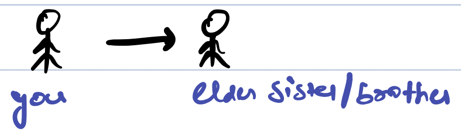
↳ Intro

↳ output

↳ operators

↳ Data types

* Computer is ! → Dumb



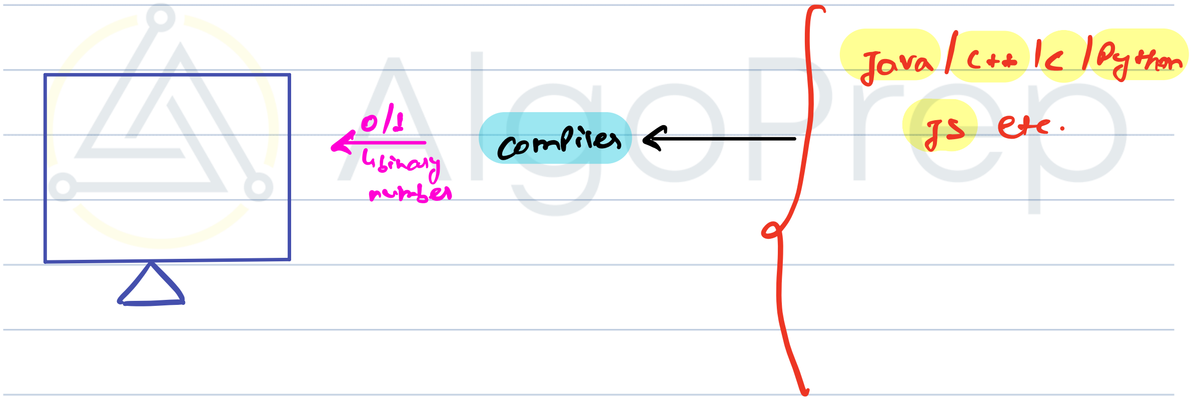
a) get up from bed

b) go to kitchen

c) get a glass

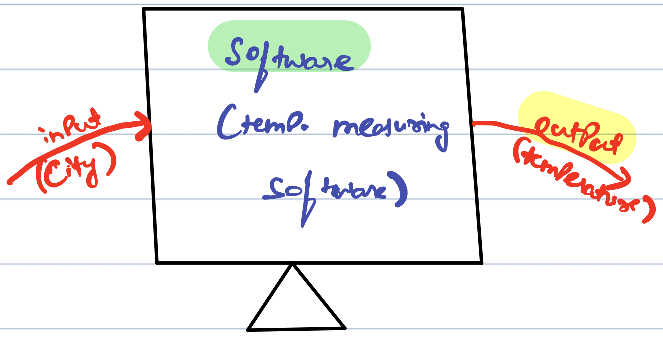
d) fill glass with water

e) bring the glass to me.



→ english → rules → grammar

→ Java → we will follow certain rules.
↳ Syntax



IDE

↳ Integrated devellopment environment. ↳ Eclipse / Intellij / vscode etc.] Online ide/editor

Rule 1:

① output → rule

↳ System.out.println(10); → 10

↳ next line → It will press enter after printing

System.out.println(7); → 7

↳ System.out.print(10);

↳ System.out.print(50);

↳ System.out.println(80);

↳ System.out.print(100);

output

```
10 50 80
↓
100
```

Ex:

```
System.out.print(7*10);   → 70
System.out.print(50/5);   → 10
```

↳ Double quote Printing

```
System.out.println("7*10");   → 7*10
```

↳ Plus sign in output

```
System.out.println(7*10+"Hello");   → 70Hello
System.out.println("Hello"+7*10);   → Hello70
System.out.println("Hello"+7+10);
```

+

↙ ↘

number + number → mathematical addition

"double quote" + number → "concatenate"

* Operators

↳ + − * / ( ) → B~~O~~DMAS

$5 + 5 \div 5 = 6$

↳ Myth buster

Rank 1: ( )

Rank 2: ÷

Rank 3: *

Rank 4: +

Rank : −

Rank 2: Divide / multiply

↳ Compiler will process left to right.

Rank3: add / subtract

↳

Break till 9:40 pm

* Data types

↳ Numbers, Characters, boolean etc.

Integer decimal

true false

↳

uses

add 2 numbers

receive number → variables

1

2

3

10

Let the first number be "x"

↓

variables

→
```
int x;
x = 20;
x = 30;
```

Type name

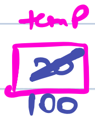
→
```
int x;
x = 100;
```

equivalent value

= ↙ assigment
↳ right side to left side

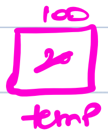
Ex1:

```
int temp;
temp = 20;
temp = 100;
→ System.out.println (temp); → 100
```



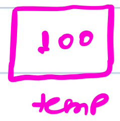
Ex2:

```
↘ int temp;
temp = 20;
System.out.println (temp); → 20
temp = 100;
System.out.println (temp); → 100
```

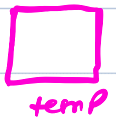


Ex3:

```
int temp;
temp = 100
```



```
↳ int temp;
temp = 20;
```



```
System.out.println (temp);
```

↳ Same name can't be created again.

Creating variables

1st way

declare

```
int temp;
temp = 20;
```

initialization

2nd way

```
int temp = 20;
```

↳ both declare & initialize in same line.

// Input

name

→ once in a code

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

int temp = scn. nextInt();

↓ integer

No such element exception → Not given the input.