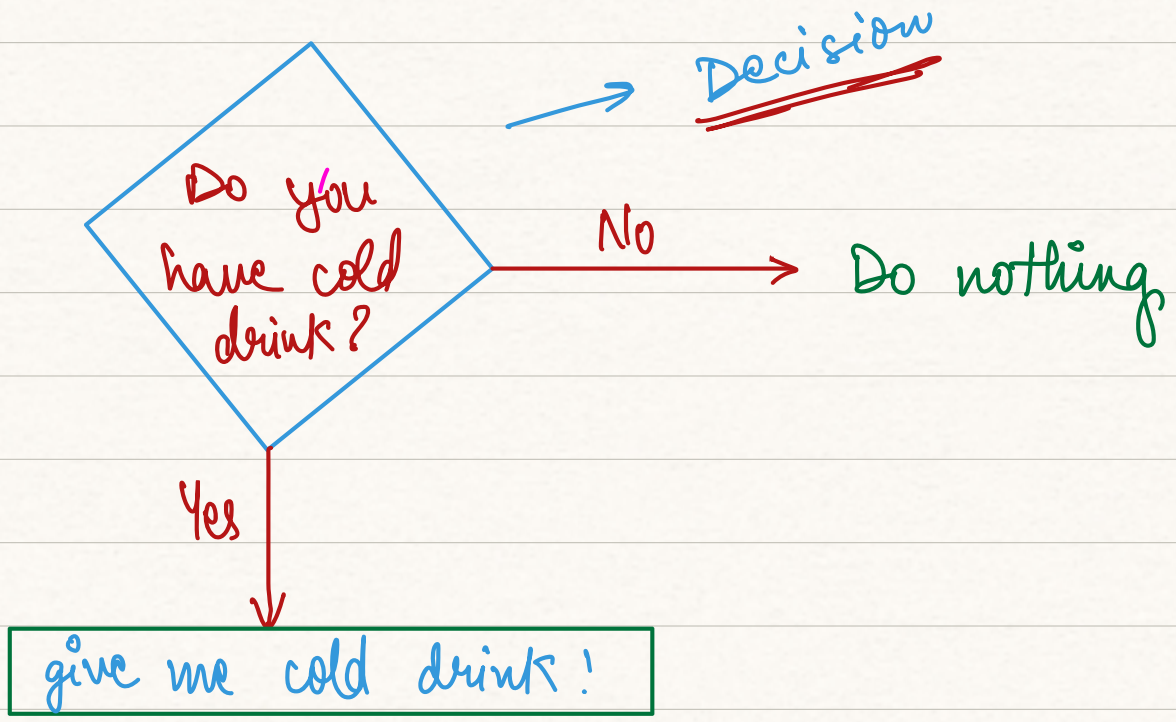
System.out.print ( ) ; ⟶ print the text

System.out.println ( ) ; ⟶ print and press enter key

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

int num = scn.nextInt();
```

If cold drink is available, give me cold drink.



Statement with only true / false answers
↳ conditional statements

Data type → Boolean

Integer
- int
- long

Decimal
- float
- Double

True/false → Boolean

Text → String

Eligible to vote

age > 18 X

age != 17 X

age == 18 X

age >= 18 ✓

age
18

5

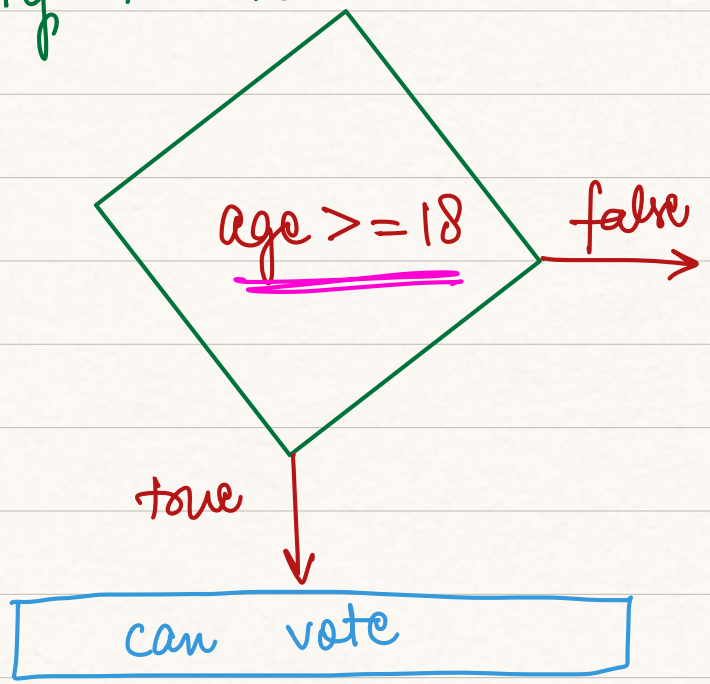
21 == 18

age = 18

age = 5

age = 21, 45

Eligibility to vote



Syntax

[true / false]

boolean expression

```
if ( condition ) {
    // write code
    // to run when the condition is true
}
```

```
if ( age >= 18 ) {
    System.out.print (" You are eligible to vote");
}
```

Quiz.

true ✓

4 == 5 (false) ✓

4+5 = 9 ✗

4 < 5 (true) ✓

false ✓

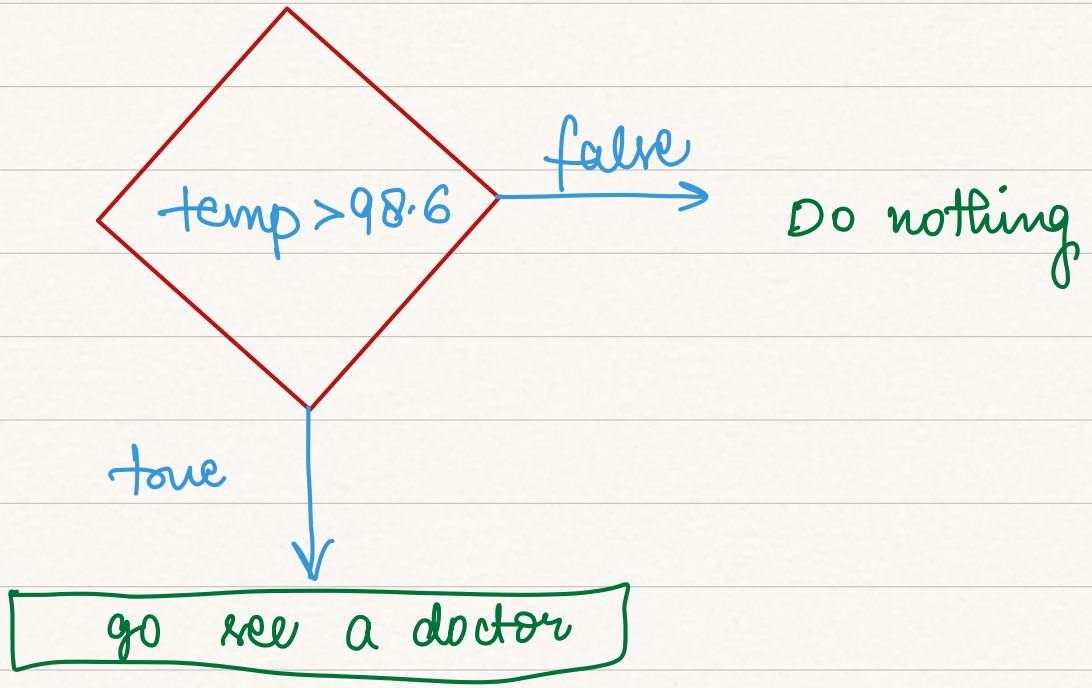
a is equal to b

(a == b)

true ← → false

Ques. Check whether a person has fever.

temp > 98.6

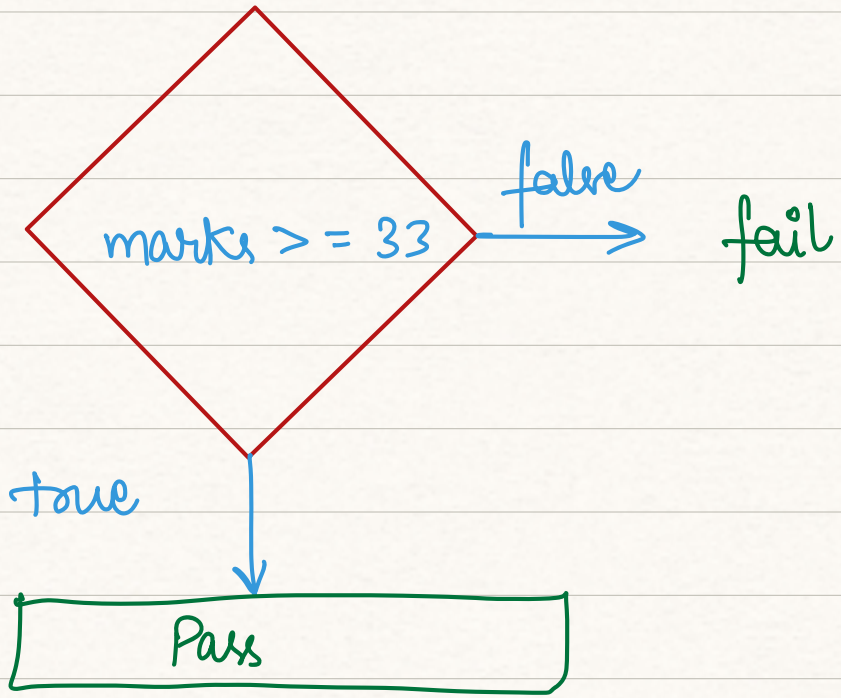


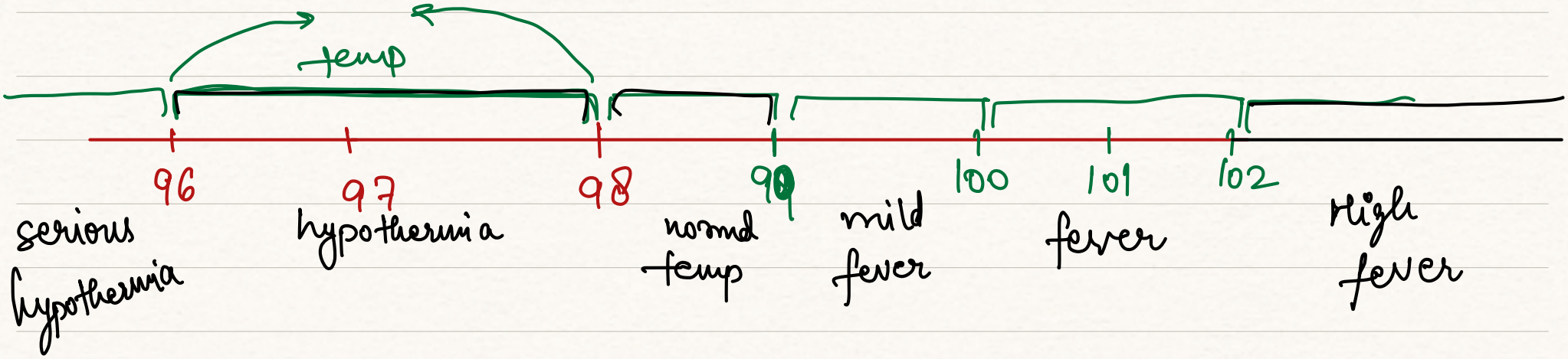
Clues. Check whether a person is pass in Maths.

marks >= 33

marks = 30

marks = 80





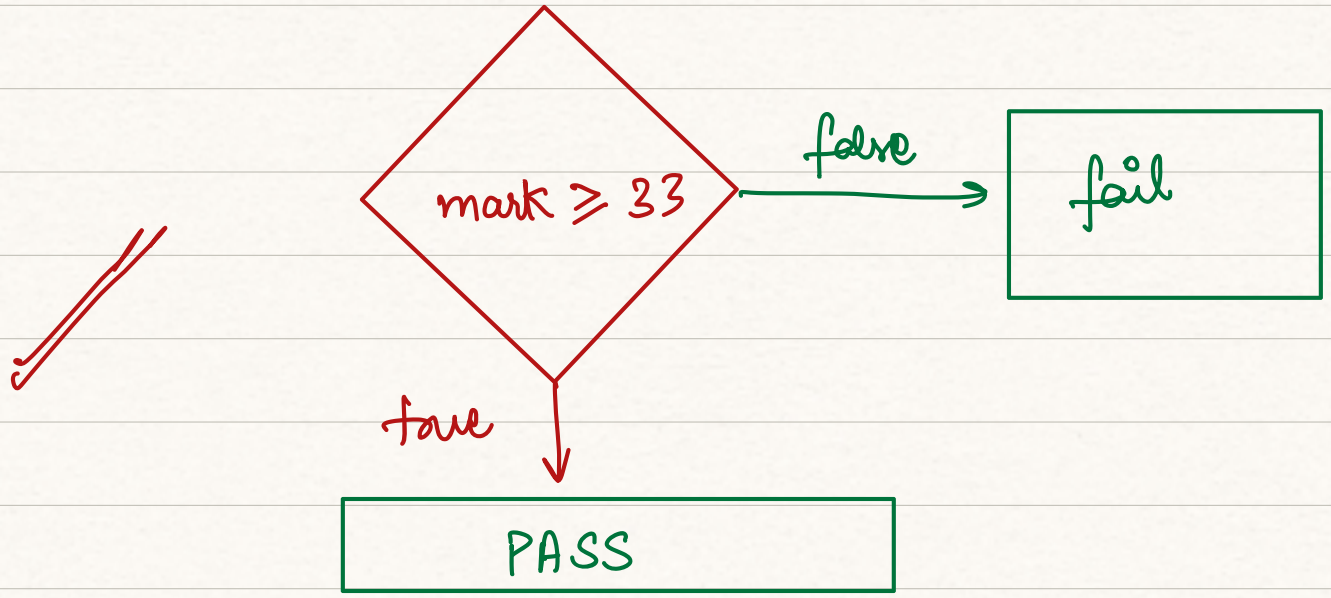
temp = 99.4 → mild fever

temp = 95.7 → serious hypothermia

temp = 98.4 → normal temp

$96.0 < \text{temp} \leq 98.0$ → hypothermia

```
if (temp > 96.0 && temp <= 98.0) {
    (hypothermia)
}
```

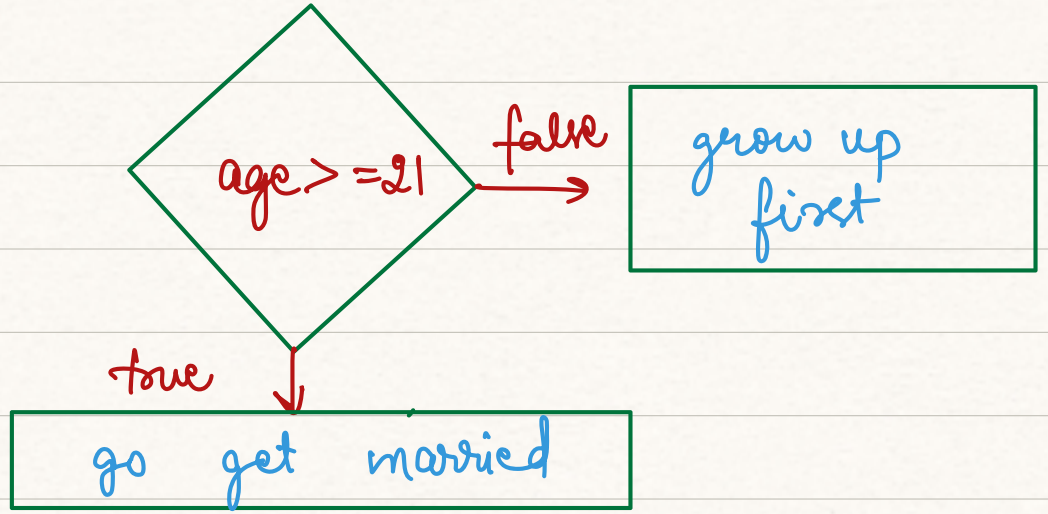


Syntax →

```
if ( condition ) {
(true) ──→ // code to run when condition is true
}
else {
(false) ──→ // code to run when the condition is false
}
```

```
if (marks >= 33) {
    System.out.println ("Pass");
}
else {
    System.out.println ("Fail");
}
```

Ques. Check if a male person is legally eligible to get married



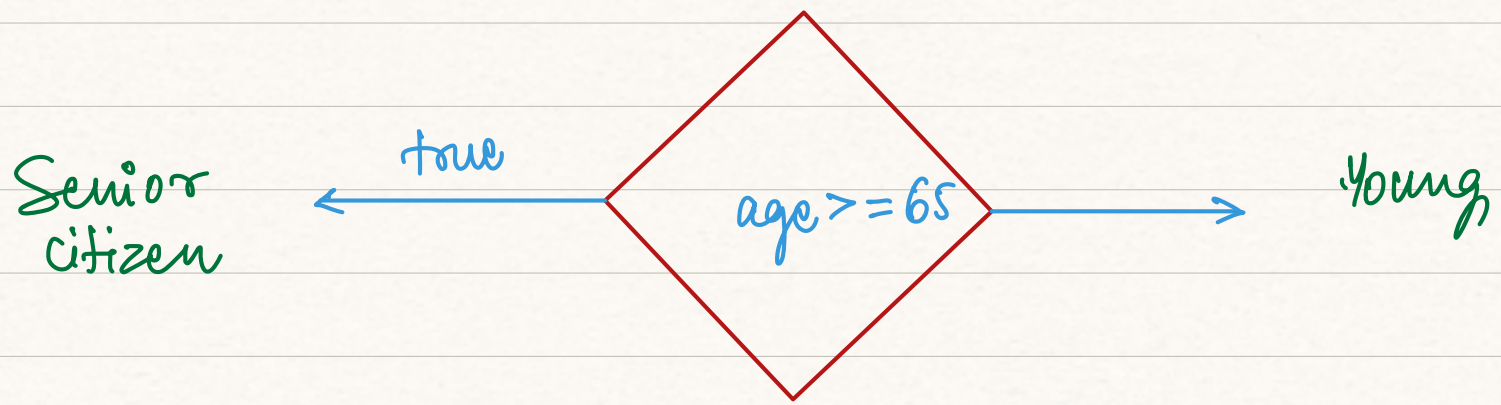

```
int age = scn.nextInt();
```

```
if ( age >= 21 ) {
    System.out.println ("go get Married");
}
else {
    System.out.println ("You are a minor");
}
```

Ques. Check if the person is "young" or "senior citizen"

(age is greater than or equals to 65)

senior citizen



age = 15 ⟶ Young

age = 67 ⟶ senior citizen

```
if ( age >= 65 ) {
        System.out.println ("Senior citizen");
}
else {
        System.out.println ( "Young");
}
```

```
if (condition) {
    // Line 1
}
else {
    // Line 2
}
```

// true → Line 1

// false → Line 2

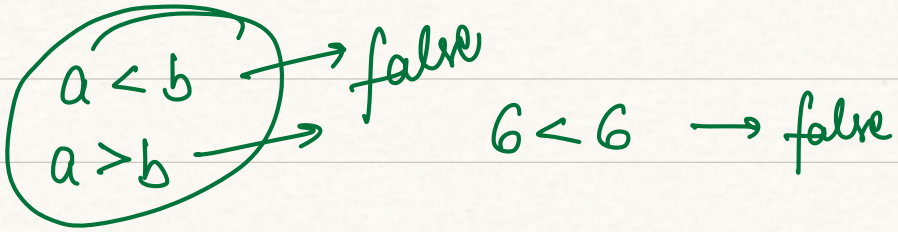
```
if (condition 1) {
    // Line 1
}
if (condition 2) {
    // Line 2
}
```

condition 1 is false

↳ Line 2 will execute ∝

Line 2 will execute
when condition 2 is true

a = 6 , b = 6




```
if (a < b) {
    System.out.println("a is larger"); //L1 ↑
} else {
    System.out.println("b is larger"); //L2 ↓
}
```

Output → b is larger

5 > 4 → true

```
if (5>4) {
    → System.out.println ("First if");
}

if (10>=6) {
    → System.out.println ("Second if");
}
```

10 >= 6 → true

Output →

First if
→ Second if

Can "If" exist without "Else" → Yes

Can "Else" exist without an "If" → No

```
if (true) {
    System.out.println("Hey there!");
}
System.out.println(10+20);
```

Output →

Hey there!

→ 200

% → modulus [remainder]

14 % 2 → 0 [14 is completely divisible by 2]

```
    7
2 ) 14 (
    14
    --
     0
```

19 % 2 → 1

54 % 2 → 0

Even number % 2 ⇒ 0

67 % 2 → 1

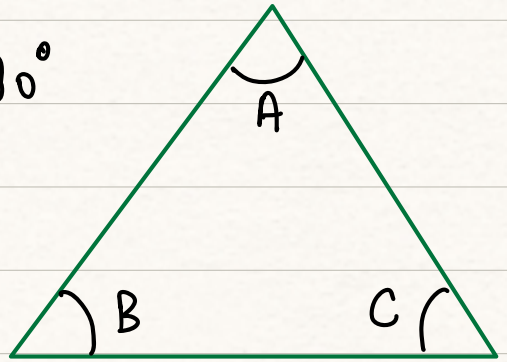
Ques. Check wheck whole number is even or odd.

Even → 0, 2, 4, 6, ----

Odd → 1, 3, 5, 7, ----

Ques. Check whether a triangle is valid

sum of all angles of triangle = 180°



A = 60 B = 60 C = 60

A + B + C = 180°

" VALID "

A = 40 B = 30 C = 50

A + B + C = 120°

" NOT VALID "

₹ 120 ₹ 20 

total notes = $\frac{120}{20}$ = 6

```
float amount = scn.nextFloat();
int note = scn.nextInt();
int total_bills = (int)(amount/note);
```

Rahul = N Karan = M

N = 50

M = 30

After giving 5 apples to Karan

Now, Rahul has (N-5) apples ⇒ 45

Karan has (M+5) apples ⇒ 35

After plucking (2*N) apples (Rahul took 100 apples)

Now, Rahul has (N-5) + (2*N) =

Karan has (M+5) apples

Total apples of Rahul = 100+45
= 145

Karan = 35

2*N + N - 5 = 3*N - 5 ✓

M+5 ✓