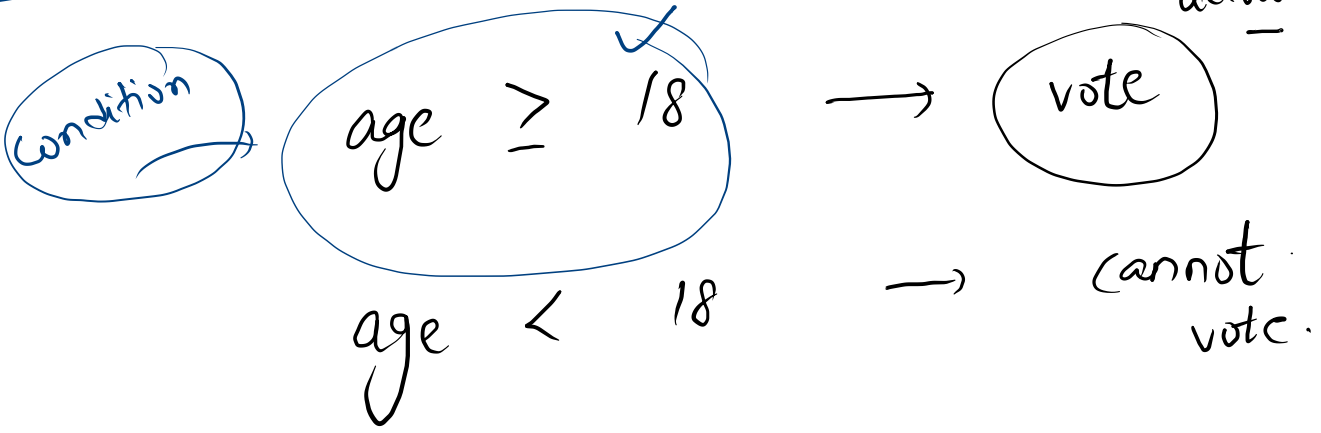
Operators

- Ar. (+ - / * %)
- Comp. (< , > , <= , >= == !=)
- Logical. (&& ||)

Conditional Statements.

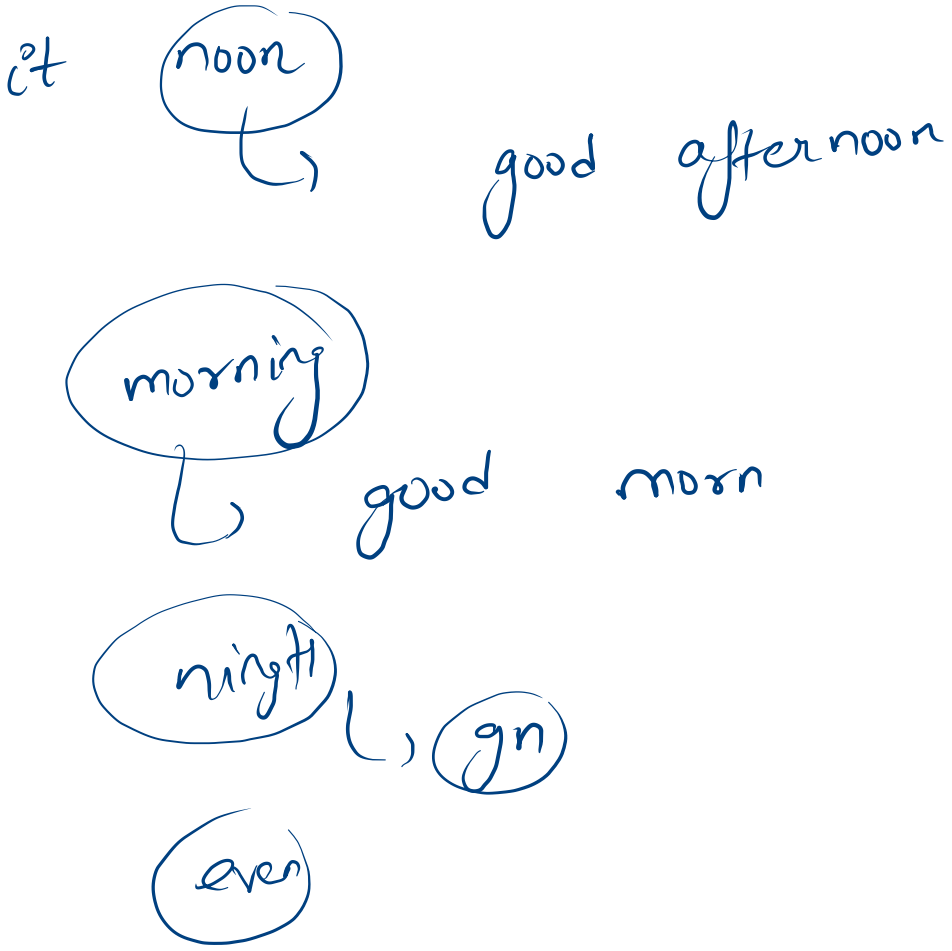


deal with conditions, in programming.

⇓

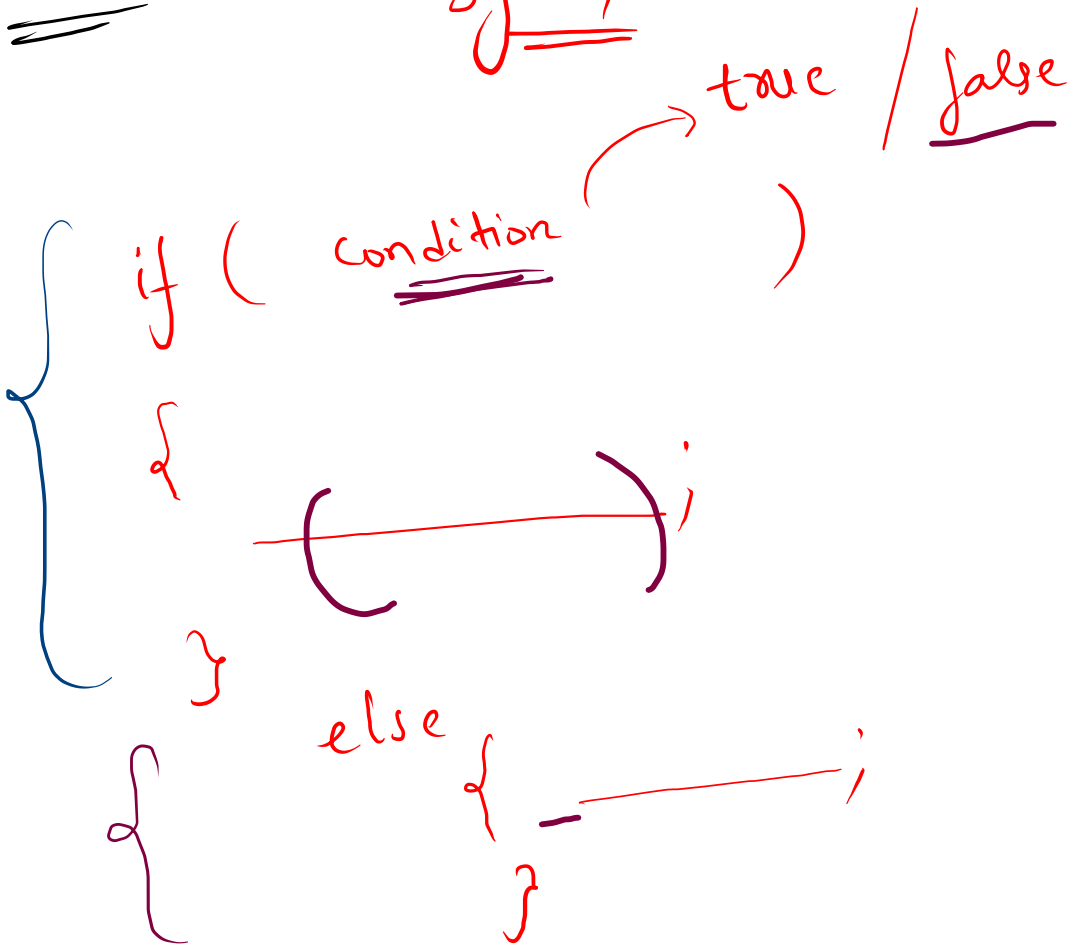
Conditional statement

(if , else if , else)


it
noon
good afternoon
morning
good morn
night
gn
eve

if - else

Syntax.

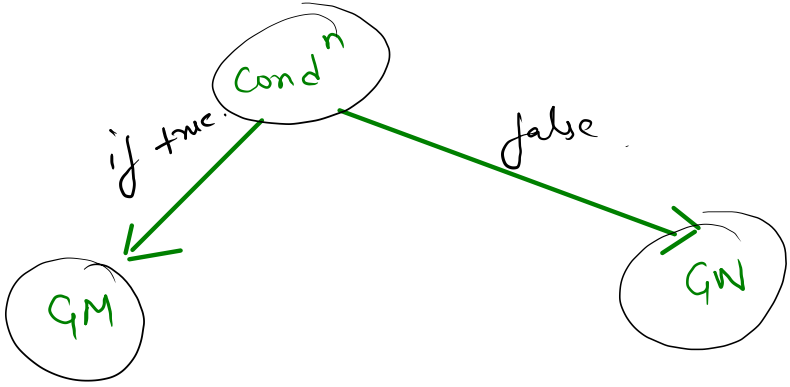


```java
public class Main
{
    public static void main(String[] args) {

        int time = 9;
        if(time < 12){
            System.out.println("Good Morning");
        }
        else{
            System.out.println("Good Night");
        }
    }
}
```

Condition.

9 < 12



```
if ( condition )
{
    body of 'if statement' : work ( 1 line)
}
else{
    body of 'else statement : work
}
```

eg

Syntax.

```java
public class Main
{
    public static void main(String[] args) {

        int age = 8;
        if(age < 18){
            System.out.println("Junior");
        }
        else {
            System.out.println("Senior");
        }
    }
}
```

1. else without if ?

Adult or not 1

You will be given the age of a person as an integer input, you need to print "Adult" if the age is greater than or equal to 18 and print “Below age” if the age is below 18.

age >= 18

↳ adult Adult

else

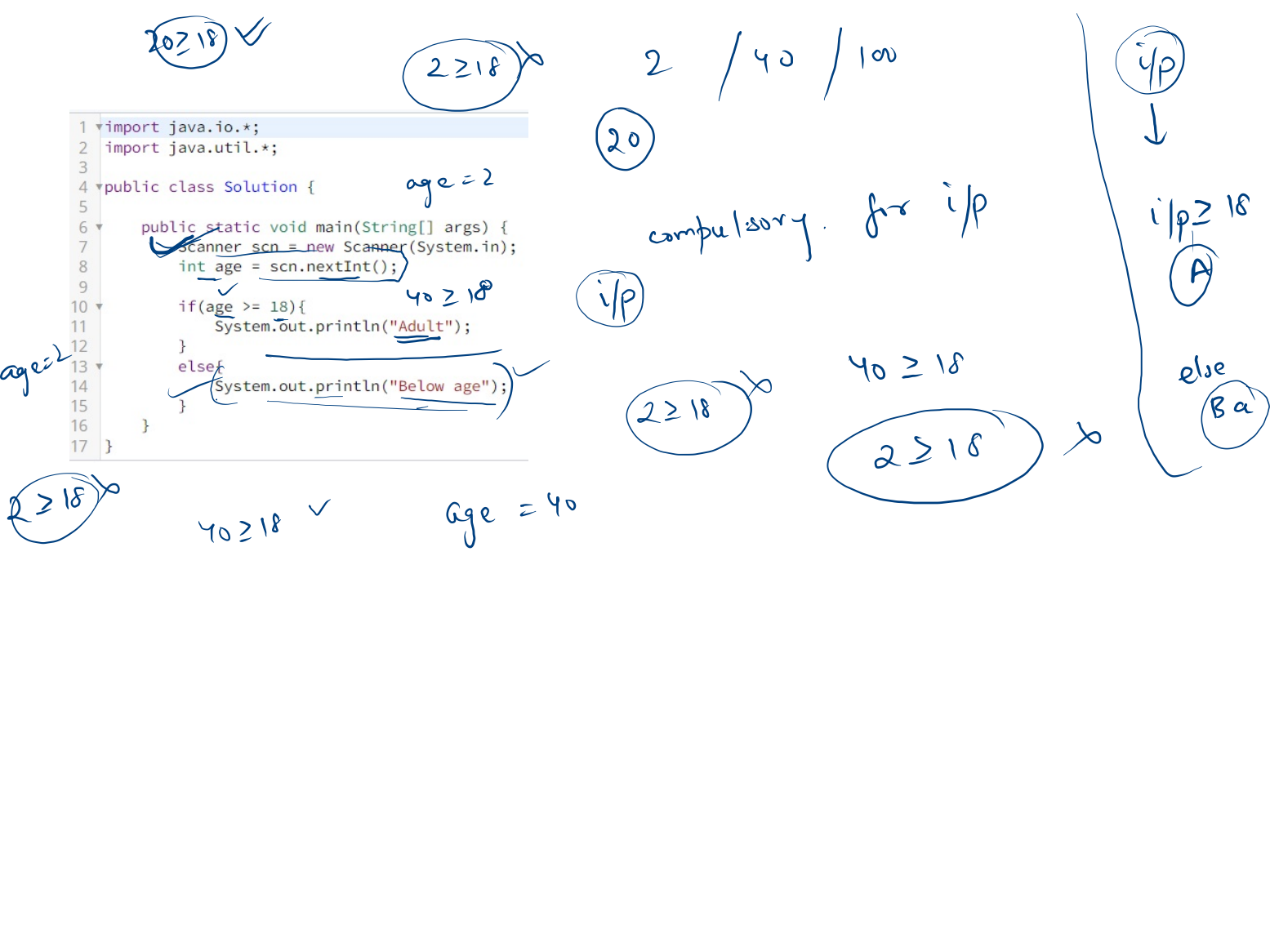
↳ Below age

Sample Input 0

```
20
```

Sample Output 0

```
Adult
```




```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int age = scn.nextInt();

        if(age >= 18){
            System.out.println("Adult");
        }
        else{
            System.out.println("Below age");
        }
    }
}
```

Shop Discount

Problem | Submissions | Leaderboard | Discussions

A shop will give a discount of 10% on the total cost if the cost of the quantity purchased is more than 1000. a. Ask user for the number of units b. Suppose, one unit will cost 100. c. Judge and print total cost for the user in the integer format.

Sample Input 0

```
15
```

Sample Output 0

```
1350
```

10 %

↳ $\frac{10}{100} = \frac{1}{10}$

$= 0.1$

1. i/p { qty

1 qty → ₹ 100

cost of qty > 1000

↳ disc = 10% of cost

1. qty ⟶ user

qty 50

2. 1 → ₹ 100

50 → 5000

1. i/p qty = 20

2. cost = 20 × 100

= 2000

cost > 1000

disc = $\frac{10}{100} \times 2000$ = 200

cost − disc

= 1800

eg.1

qty = 10

1 qty = 100

cost 10 qty = 1000

cost > 1000

↳ give 10%

1000

eg 2

qty = 50

1 qty = 100

50 qty = 5000

5000 > 1000

↳ give discount

$d = \frac{10}{100} \times 5000$

$= 500$

cost 4500

```java
public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int qty = scn.nextInt();
        int cost = qty * 100;

        if(cost > 1000){
            int disc = (cost*10)/100;
            System.out.println(cost - disc);
        }
        else{
            System.out.println(cost);
        }
    }
}
```

High Sum or Low Sum

Problem | Submissions | Leaderboard | Discussions

You will get two integer inputs x and y, you need to print "High Sum" if sum is greater than or equal to 100, and print "Low Sum" otherwise.

Sample Input 0

```
40
70
```

Sample Output 0

```
High Sum
```

i/p { x
y

x+y ≥ 100
↳ High Sum

else
low sum

x+y ≥ 100
↳ HS

else
↳ LS

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int x = scn.nextInt();
        int y = scn.nextInt();

        if(x + y >= 100){
           System.out.println("High Sum");
        }
        else{
           System.out.println("Low Sum");
        }
    }
}
```

x=2

x=5

```
if (x==2)
  {   Syso("Two");
  }
else
   {  Syso("Not Two");
   }
```

if - else if - else

```
if ( condⁿ)
{
    A
}
else
{
    B
}
```

```
if ( condⁿ 1)
{
    A
}
else if ( condⁿ 2)
{
    B
}
else {
    C
}
```