

## if - else statement

if (true) {  
    ≡  
}

{ else {  
    ≡  
}

plan for condition  
if ( ) {

{ else {

{

n = 27    Even / odd  
if (n % 2 == 0) {  
    false  
    syso("Even");  
}  
else {  
    syso("odd");  
}

age = 12 ⇒ allowed  
18 yrs    not allowed

if (age >= 18) {  
    syso("allowed");  
    ≡  
    ≡  
    ≡  
    block executed for true

else {  
    syso("not allowed");  
}

↳ main() {

if ( ) {

{ else {

{

top to down  
and  
left to right!

\* else may or may not  
be present with if  
condition

① if (true) { }    ② if (false) { }    ③ if (false) { }

≡  
{ }

{ }

{  
else { }

④ if (true) { }  
else { }

≡ executed  
{ }

⑤

marks {  
    A → 80  
    B → 70  
    C → 60  
import java.util.\*;

public class Solution {

    p.s.v. main (String[] args) {  
        int marks = 95

marks  
[95]

95 = A

80 = B

if (marks > 80) {  
    sys ("A");

else if (marks > 70) {  
    sys ("B");

else if (marks > 60) {  
    sys ("C");

else { sys ("D"); }

}

die 1, 2, 3, 4, 5, 6  
if (value == 1) {

else if (value == 2) {

{

else {

}

}

~~if ( ) {~~  
~~}~~  
~~else if ( ) {~~  
~~}~~  
~~else {~~  
~~}~~

\* if (val == 1) {  
     }  
 else if (val == 2) {  
     }  
 }

```

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 if (age == 18) {
            System.out.println("Adult");
        }
        } else {
            System.out.println("Below age");
        }
        /* Enter your code here. Read input from STDIN. Print output to
    }
}
  
```

age = 9

below age

if (age > 18 || age == 18) {  
     ("Adult")  
 }

below age

if (true || true) {  
     }  
 } else {  
     }

if (a) {  
     }  
 else if (b) {  
     }  
 }

Sol

pseudo code

```
int units = 15;  
int price = units * 100;
```

unit  
15

price  
1500

(if <sup>false</sup>)

discount = 150;  
syso(price - dis);

{ else  
syso(price);  
}

unit

6

price

600

600

Ans

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

unit  
12

price  
1200 1050

```
    ✓ int price = units * 100;
```

```
    if (price > 1000) {  
        ✓ int discount = (price * 10) / 100;  
        price = price - discount;
```

discount 150

```
    }  
    System.out.println(price);
```

1050

```
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Yo
```

```
    }
```

int z = 100

if ( ) {

z = z + 50;

← 150

System.out.println(z);

z  
100  
150

z = z + 50; α  
z += 50;

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int marks = scn.nextInt();  
  
    if(marks>90){  
        System.out.println("excellent");  
    }else if(marks>80){  
        System.out.println("good");  
    }else if(marks>70){  
        System.out.println("fair");  
    }else if(marks > 60){  
        System.out.println("meets expectations");  
    }else if(marks > 40){  
        System.out.println("below par");  
    }else {  
        System.out.println("failed");  
    }  
    /* Enter your code here. Read input from STDIN. Print output to STDOUT  
}
```



Q Bonus

int salary = 2000;

int yrs = 6;

int bonus = 0;

if (yrs > 5)

✓ bonus =  $(2000 * 5) / 100$ ;

{

System.out.println(bonus);

```
public class Solution {
```

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

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

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

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

```
        int bonus = 0;
```

```
        if (yrs > 5) {
```

```
            bonus = (salary * 5) / 100;
```

```
        }
```

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

```
        /* Enter your code here. Read input from STDIN. Print output to S
```

```
    }
```

salary

2000

yrs

6

3

bonus

100

$(2000 * 5) / 100 =$

$\frac{10000}{100}$

100