

Last Session

-> Logical Session

Today's Session

-> OPERATORS in JAVA

Programming

Data Processing

Tools

Operators

username



password



1. Arithmetic
2. Relational
3. Logical
4. Bitwise (Binary)
5. Ternary

if - else ?

1. Arithmetic Operators :->

+ , **-** , ***** , **/**

% :-> Modulo

returns remainder of division

$$6 / 2 \Rightarrow 3$$

$$5 / 2 \Rightarrow 2.5$$

Even

ODD

unit palce

tenth palce

A handwritten long division problem showing 2 divided into 6. The quotient 3 is written above the 6, enclosed in a pink box. A horizontal line is drawn below the 6. Below the line, the number 6 is written with a minus sign, also enclosed in a pink box. The result is 0, enclosed in a pink box. To the right of the boxes, there are handwritten red marks: a circled '3' above the first box and a checkmark-like symbol next to the second box.

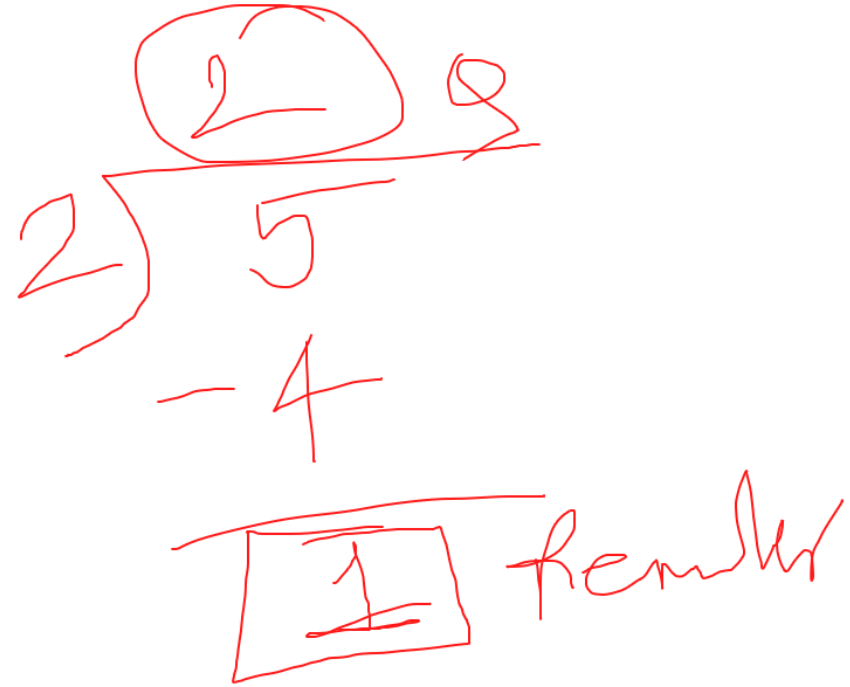
WAP to check number is even or odd ?

int n = 5;

int r = 5 % 2; //1

r == 0

5 / 2



```
int n    = 123;  
int n1   = 456;  
n + 10 => op => 133
```

```
123 % 10 => 3
```

```
int r = 123%10;
```

```
?r == 3 ?
```

rev => 321

loop

```
123 % 10 => 3  
123/10   =>(int) 12  
rev = 3
```

```
12%10   => 2  
12/10   => 1  
rev = rev*10 + 2 => 32
```

```
1 % 10 => 1  
1/10  => 0  
rev = rev*10 + 1 => 321
```

2. Relational Operators :->

> , >= , < , <=

These operators always returns result in Boolean (true / false)

Equality operators :->

== , !=

equals to equals

```
int jay = 21;  
int viru = 22;
```

```
jay != viru => true
```


3. Logical Operators :->

1. and => &&
2. or => ||
3. not => !

Logical Anding

| Jay | Viru | Plan |
|-----|------|------|
| N | N | N |
| N | Y | N |
| Y | N | N |
| Y | Y | Y |

! A => ?

when both the operands are true then result is true

A && B => True

| A | B | C |
|-------|-------|-------|
| False | False | False |
| False | True | False |
| True | False | False |
| True | True | True |
| | | |

Logical Oring

| Jay | Viru | Plan |
|-----|------|------|
| N | Y | Y |
| Y | N | Y |
| Y | Y | Y |
| N | N | N |

$A \parallel B \Rightarrow$

| A | B | C |
|---|---|---|
| f | f | f |
| f | t | t |
| t | f | t |
| t | t | t |

Not operator !

4 wheeler :-> Air bags

2-4-6

Accident ?
sensor

airbag = seatbelt && pressure && speeddrop;

seat belt => true

pressure => true

speeddrop => true

Bitwise Operator :->

&

|

!

<<

>>

5 => 0101

&

2 => 0010

7 => 0111

0 = 0000

