Logical Operator

Logical Operator	Java Operator
AND	&&
OR	||
NOT	!

1.AND→&&

value1	value2	Marriage
boy(yes)	girl(NO)	NO
boy(no)	girl(yes)	NO
boy(no)	girl(no)	NO
boy(yes)	girl(yes)	YES

AND--&&: Rule: Result is True only when both inputs are TRUE.

input1	input2	Result
True	False	False
False	True	False
False	False	False
True	True	True

System.out.println("(5>1)&&(5>3):"   +((5>1)&&(5>3)))
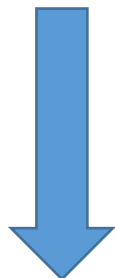
output:

(5>1)&&(5>3):true

2.OR --> ||

value1	value2	Marriage Success
husband(bad)	wife(good)	YES
husband(good)	wife(bad)	YES
husband(good)	wife(good)	YES
husband(ego)	wife(ego)	NO

Logical OR Operator || Rule: Result is False if both the inputs are False.

input1	input2	Result
False	True	True
True	False	True
True	True	True
False	False	False

Program Below

```java
public class LogicalOperator
{

    public static void main(String args[])
    {
    System.out.println("Logical AND Operator\n");
    //AND &&: Rule: Result is True only when both inputs are TRUE.

    System.out.println("(10>1)&&(10>5):"+((10>1)&&(10>5)));//true
    System.out.println("(10>1)&&(10>100):"+((10>1)&&(10>100)));//false
    System.out.println("(10>100)&&(10>1):"+((10>100)&&(10>1)));//false
    System.out.println("(10>100)&&(10>200):"+((10>100)&&(10>200)));
//false

    System.out.println("\n\nLogical OR Operator\n");
//OR Operator  || Rule: Result is False if both the inputs are False.

    System.out.println("(5>1)||(5>3):"+((5>1)||(5>3)));//true
    System.out.println("(5>1)||(5>100):"+((5>1)||(5>100)));//true
    System.out.println("(5>100)||(5>1):"+((5>100)||(5>1)));//true
    System.out.println("(5>100)||(5>200):"+((5>100)||(5>200)));//false


    }

}
```

OutPut:

Logical AND Operator

(10>1)&&(10>5):true
(10>1)&&(10>100):false
(10>100)&&(10>1):false
(10>100)&&(10>200):false

Logical OR Operator

(5>1)||(5>3):true
(5>1)||(5>100):true
(5>100)||(5>1):true
(5>100)||(5>200):false

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