

Java for beginners

Decision control



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Agenda

- ① Decision Control statements
- ② if
- ③ if else
- ④ Conditional Operator
- ⑤ nested if
- ⑥ if else ladder

Decision Control Statements

- if
 - if else
 - conditional Operator
 - nested if else
 - if else ladder
- {
 |||
 |||
 |||
if() {
 |||
 |||
 |||
}
 |||
 |||
 |||
}
- {

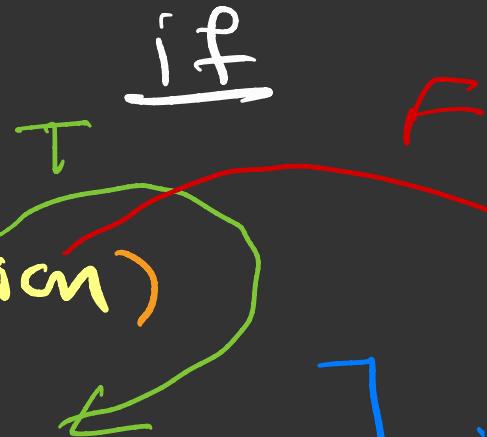
Keyword

if (condition)

{

 |
 |
 |

}



Condition must be evaluated as a
boolean value

Write a Java program to check whether a given number is positive or non positive.

```
public void isPositive( int num ) {  
    if ( num > 0 )  
        System.out.println( " Positive" );  
    if ( num <= 0 )  
        System.out.println( " Non-Positive" );  
}
```

if else

Keyword
↓

if (condition)
{

≡
≡

] if
block

true

false

}

else

Keyword
↓ {

≡
≡

] else
block

}

Write a Java program to check whether a given number is positive or nonpositive.

```
public void isPositive( int num ) {  
    if ( num > 0 )  
        System.out.println( "Positive" );  
    else  
        System.out.println( "Non-Positive" );  
}
```

Conditional Operator

condition ? exp1 : exp2



Ternary
operator

Conditional operator is an expression
if else is not an expression.

$x = \text{if} ()$
—
 else —

wrong

$x = -? - : - ;$

Correct

Write a Java Program to check whether a given number is positive or non positive.

if ($x > 0$)

 System.out.println ("Positive");

else

 System.out.println ("Non Positive");

$x > 0 ? \text{s.o.p}(\text{"Positive"}) : \text{s.o.p}(\text{"Non Positive"})$

error

Nested if else

```
if ( condition )  
{
```

```
    if ( condition )  
{
```

==

}

==

}

```
if ( condition )  
{
```

```
    if ( condition )  
{
```

==

```
    }  
else
```

```
{
```

==

}

else

```
{
```

```
    if ( condition )  
{
```

==

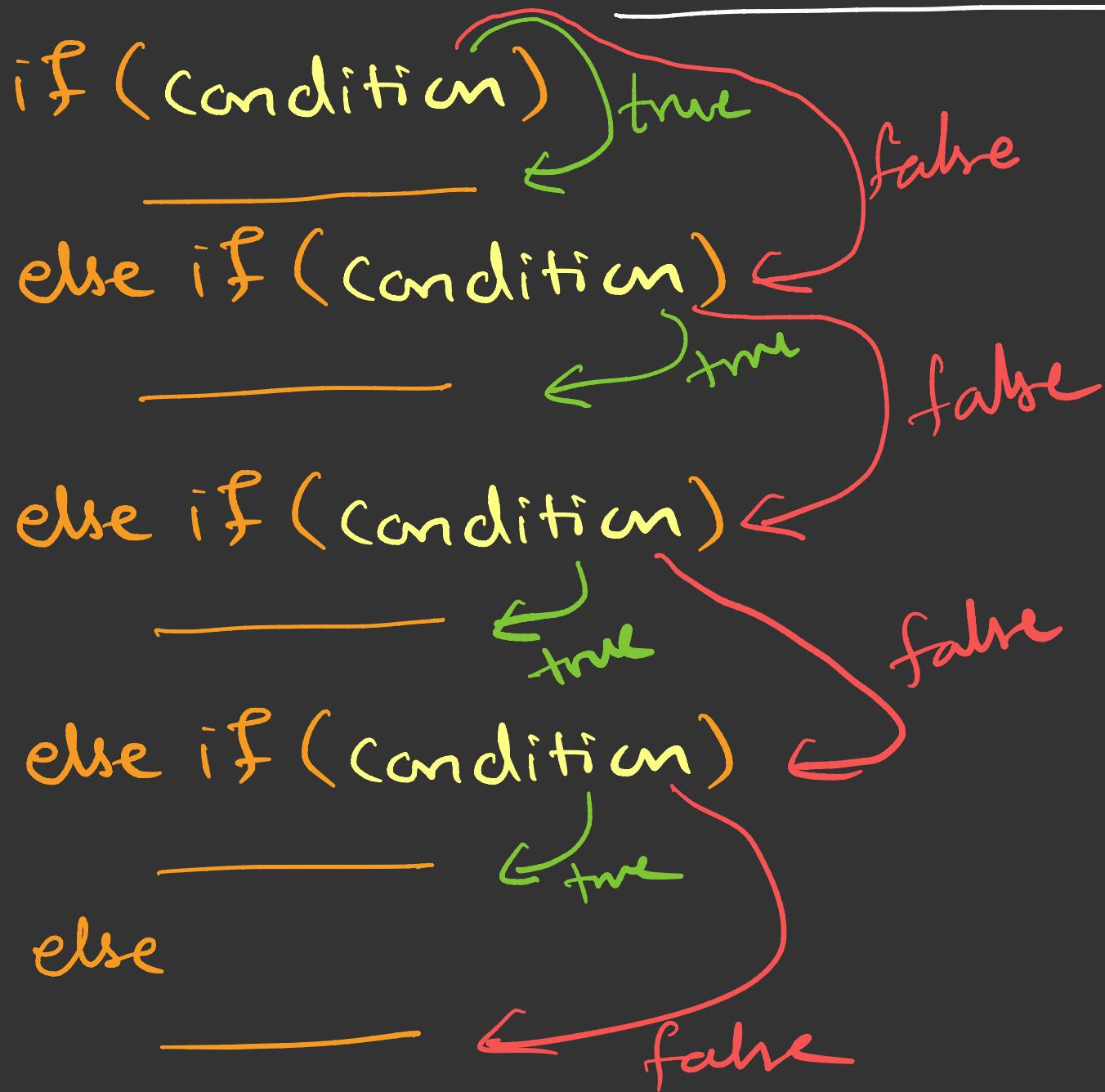
}

}

In Bhopal, there is a special train with peculiar fare system. Ticket price is Rs 10 for male with age above 50, Rs 20 for rest of the male passengers. Ticket Price is Rs 50 for female with age below 30 yrs and for rest of the females ticket price is Rs 40.

Write a Java program to display ticket price for a passenger.

if else ladder



Grading System in an exam is as follows:

marks	grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
50 - 59	E
below 50	F

Write a Java program to calculate grade for the given marks obtained in exam by a candidate.