

CORE JAVA

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Flow Control

- Flow control describe the order in which the statement will be executed at run time
- 1)Selection Statement
 - I. If-else
 - II. switch
- 2)Iterative Statement
 - I. While loop
 - II. Do-while loop
 - III. For loop
- 3)Transfer Statement
 - I. Break
 - II. Contiune
 - III. Return
 - IV. Try catch

1)If -Else

```
If (b)
{
    Action of a is ture;
}
Else
{
    Action of b is false
}
```

The Java if-else statement also tests the condition. It executes the *if block* if condition is true otherwise *else block* is executed.

```
int time = 20;  
if (time < 18)  
{ System.out.println("Good day.");  
}  
Else  
{  
    System.out.println("Good evening.");  
} // Outputs "Good evening."
```

E.g1

```
int x=10;
```

```
if(x)
```

```
{
```

```
System.out.println("Hello");
```

```
}
```

```
else{
```

```
System.out.println("Hii");
```

```
}
```

CE -:incompatible type found int x=10
required Boolean

E.G 2

```
int x=10;
If(x==20)
{
System.out.println("Hello");
}
Else{
System.out.println("Hii");
}
```

O/P-Hi

E.g3

```
int x=10;
If(x=20)
{
System.out.println("Hello");
}
Else{
System.out.println("Hii");
}
```

CE -:incompatible type found int x=10
required Boolean

E.G 4

```
boolean b=true;
If(b=false)
{
System.out.println("Hello");
}
Else{
System.out.println("Hii");
}
```

O/p-: Hiii

E.G 5

```
boolean b=true;
If(b==false)
{
System.out.println("Hello");
}
Else{
System.out.println("Hii");
}
```

O/P-: Hello

How to use if

- Eg 1

- If(true)
- SOP("Hello");

- Eg 2

- If(true);

- Eg 3

- If(true)
- int x=10;
- CE-:Error

- Eg 4

- If(true)
- {
- int x=10;
- }

1. Both else part and curly brassses {} are optional
2. Without "{ }" we can write only one statement under if
3. Which should not be declaration statement

- Eg 4

```
If(true)
SOP("Hello");
else
SOP("Hiii");
```

- O/P Hello

Eg5

;;;;; is valid statement
;(Semicolon) is valid java
statement, which is also known as
empty Statement

//It is a program of odd and even number.

```
public class IfElseExample {  
public static void main(String[] args) {  
  
    int number=13;    //defining a variable  
    if(number%2==0) //Check if the number is divisible by 2 or not  
    {  
        System.out.println("even number");  
    }  
else{  
        System.out.println("odd number");  
    }  
}  
}
```

WAP – Find no is positive negative or zero

```
public class PositiveNegative {  
    public static void main(String[] args) {  
        int number=-13;  
        if(number>0){  
            System.out.println("POSITIVE");  
        }else if(number<0){  
            System.out.println("NEGATIVE");  
        }else{  
            System.out.println("ZERO");  
        }  
    }  
}
```

```
public class IfElseExample {  
public static void main(String[] args) {  
  
    int marks=65;  
  
    if(marks<50){  
        System.out.println("fail");  
    }  
    else if(marks>=50 && marks<60){  
        System.out.println("D grade");  
    }  
    else if(marks>=60 && marks<70){  
        System.out.println("C grade");  
    }  
}
```

```
}  
else if(marks>=70 && marks<80){  
    System.out.println("B grade");  
}  
else if(marks>=80 && marks<90){  
    System.out.println("A grade");  
}  
else if(marks>=90 && marks<100){  
    System.out.println("A+ grade");  
}  
else{  
    System.out.println("Invalid!");  
}  
}  
}
```

1)Using If statement write a program in java to determine the largest of two number(using scanner class)

```
import java.util.Scanner;

public class FindLarger {

    public static void main(String[] args) {

        int largest;

        Scanner s= new Scanner(System.in);

        System.out.println("Enter the first number");

        int num1=s.nextInt();

        System.out.println("Enter the Second  number");

        int num2=s.nextInt();
```

```
largest=GetLargest(num1,num2);
    System.out.println(" Largest of= " +num1 + " and " +num2+" is
"+largest);
    s.close();
}

static int GetLargest(int a,int b)
{   if(a>b)
    return a;
    return b;
}
}
```