

# Today's Topic

- Ternary Operator

# Ternary Operator

The ternary operator (?) is used to conditionally execute simple expressions.

```
condition ? expression1 : expression2
```

First condition is checked if it is true then expression1 is evaluated else expression2 is evaluated.

```
import java.util.Scanner;
class demo
{
    public static void main(String args[])
    {
        Scanner stdin=new Scanner(System.in);
        System.out.println("Enter 2 nos :");
        int a=stdin.nextInt( );
        int b=stdin.nextInt( );

        if ( a>b )
            System.out.println("Greatest Number is " + a );
        else
            System.out.println("Greatest Number is " + b );
        }
    }
}
```

WAP to read 2 nos and find greatest of them.

Output :  
Enter 2 nos:  
5 12  
Greatest Number is 12

```
import java.util.Scanner;
class demo
{
    public static void main(String args[])
    {
        Scanner stdin=new Scanner(System.in);
        System.out.println("Enter 2 nos :");
        int a=stdin.nextInt( );
        int b=stdin.nextInt( );

        int m = a > b ? a : b ;

        System.out.println("Greatest Number is "+m);
    }
}
```

WAP to read 2 nos and find greatest of them.

Output :  
Enter 2 nos:  
5 12  
Greatest Number is 12

**condition ? expression1 : expression2**

```
import java.util.Scanner;
class demo
{
    public static void main(String args[])
    {
        Scanner stdin=new Scanner(System.in);
        System.out.println("Enter 2 nos :");
        int a=stdin.nextInt( );
        int b=stdin.nextInt( );

        System.out.println( "Greatest Number is " + ( a>b ? a : b ) );
    }
}
```

WAP to read 2 nos and find greatest of them.

Output :  
Enter 2 nos:  
5 12  
Greatest Number is 12

**condition ? expression1 : expression2**

```
import java.util.Scanner;
class demo
{
    public static void main(String args[])
    {
        Scanner stdin=new Scanner(System.in);
        System.out.println("Enter 4 nos :");
        int a=stdin.nextInt( );
        int b=stdin.nextInt( );
        int c=stdin.nextInt( );
        int d=stdin.nextInt( );
        int x = a > b ? a : b ;
        int y = c > d ? c : d ;
        int z = x > y ? x : y ;
        System.out.println("Greatest Number is "+z);
    }
}
```

a=5 b=12

c=23 d=7

x=12

y=23

z=23

WAP to read 4 nos and find greatest of them.

Output :

Enter 4 nos:

5 12 23 7

Greatest Number is 23

```

import java.util.Scanner;
class demo
{
public static void main(String args[])
{
Scanner stdin=new Scanner(System.in);
System.out.println("Enter Basic :");
int basic=stdin.nextInt( );
int hra = basic > 10000 ? 5000 : 3000 ;
int ta = basic > 15000 ? 2000 : 1000 ;
int itax = basic > 20000 ? 2500 : 0 ;
int netsal = basic + hra + ta – itax ;

System.out.println("Net Salary is “ + netsal );
}
}

```

WAP to read Basic Salary of person and calculate netSalary according to following criteria.

**NetSal=Basic +HRA +TA- Itax**

HRA	BASIC
5000	>=10000
3000	<10000

  

TA	BASIC
2000	>=15000
1000	<15000

  

ITax	BASIC
2500	>=20000
0	<20000

Basic = 17000

hra = 5000

ta = 2000

itax = 0

netsal = 24000

Output :

Enter Basic Salary: 17000

Net Salary is 24000

```

import java.util.Scanner;
class demo
{
    public static void main(String args[])
    {
        Scanner stdin=new Scanner(System.in);
        System.out.println("Enter Units :");
        int units=stdin.nextInt( );
        int rate = units > 300 ? 5 : 3 ;
        int extracharges = units > 1000 ? 500 : 0 ;
        int billamt = units * rate + extracharges ;

        System.out.println("Bill Amount is " + billamt );
    }
}

```

WAP to read Electricity Units and calculate BillAmt according to following criteria.

**BillAmt=Units\*Rate +ExtraChanges**

Rate	Units
5	>=300
3	<300

ExtraCharges	Units
500	>=1000
0	<1000

**units = 600**

**rate = 5**

**extracharges=0**

**billamt = 3000**

Output :

Enter Units: 600

Bill Amount is 3000



# Today's Topic End