

## **BCA – 401: Java Programming**

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**In today's Class we have discussed on How to get input from user in Java.**

### **Java Scanner Class:-**

Java Scanner class allows the user to take input from the console. It belongs to java.util package. It is used to read the input of primitive types like int, double, long, short, float, and byte. It is the easiest way to read input in Java program.

### **Syntax:-**

```
Scanner sc=new Scanner(System.in);
```

The above statement creates a constructor of the Scanner class having System.inM as an argument. It means it is going to read from the standard input stream of the program. The java.util package should be import while using Scanner class.

It also converts the Bytes (from the input stream) into characters using the platform's default charset.

### **Methods of Java Scanner Class:-**

Java Scanner class provides the following methods to read different primitives types:

#### **1. int nextInt()**

It is used to scan the next token of the input as an integer.

## **2. float nextFloat()**

It is used to scan the next token of the input as a float.

## **3. double nextDouble()**

It is used to scan the next token of the input as a double.

## **4. byte nextByte()**

It is used to scan the next token of the input as a byte.

## **5. String nextLine()**

Advances this scanner past the current line.

## **6. boolean nextBoolean()**

It is used to scan the next token of the input into a boolean value.

## **7. long nextLong()**

It is used to scan the next token of the input as a long.

## **8. short nextShort()**

It is used to scan the next token of the input as a Short.

## **9. BigInteger nextBigInteger()**

It is used to scan the next token of the input as a BigInteger.

## **10. BigDecimal nextBigDecimal()**

It is used to scan the next token of the input as a BigDecimal.

## Example of integer input from user:-

The following example allows user to read an integer from the System.in.

```
import java.util.*;

class UserInputDemo
{
    public static void main(String[] args)
    {
        Scanner sc= new Scanner(System.in);    //System.in is a
        standard input stream

        System.out.print("Enter first number- ");
        int a= sc.nextInt();

        System.out.print("Enter second number- ");
        int b= sc.nextInt();

        System.out.print("Enter third number- ");
        int c= sc.nextInt();

        int d=a+b+c;

        System.out.println("Total= " +d);
    }
}
```

## Output:



```
C:\demo>javac UserInputDemo.java

C:\demo>java UserInputDemo
Enter first number- 6
Enter second number- 44
Enter third third- 23
Total= 73

C:\demo>_
```

## Example of String Input from user:-

Let's see another example, in which we have taken string input.

```
import java.util.*;

class UserInputDemo1
{
    public static void main(String[] args)
    {
        Scanner sc= new Scanner(System.in); //System.in is a
        standard input stream

        System.out.print("Enter a string: ");

        String str= sc.nextLine();          //reads string
```

```
System.out.print("You have entered: "+str);  
}  
}
```

## Output:

A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The command prompt shows the following sequence of commands and output:  
C:\demo>javac UserInputDemo1.java  
C:\demo>java UserInputDemo1  
Enter a string: It is a simple Java program.  
You have entered: It is a simple Java program.  
C:\demo>  
The window has a standard Windows interface with minimize, maximize, and close buttons in the top right corner.

```
C:\demo>javac UserInputDemo1.java  
C:\demo>java UserInputDemo1  
Enter a string: It is a simple Java program.  
You have entered: It is a simple Java program.  
C:\demo>
```