

Ways to read input from console in Java

In Java, there are two different ways for reading input from the user in the command line environment(console).

1. Using Buffered Reader Class

This is the Java classical method to take input, Introduced in JDK 1.0. This method is used by wrapping the System.in (standard input stream) in an InputStreamReader which is wrapped in a BufferedReader, we can read input from the user in the command line.

- The input is buffered for efficient reading.
- The wrapping code is hard to remember.

Implementation:

```
// Java program to demonstrate BufferedReader
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class Test {
    public static void main(String[] args)
        throws IOException
    {
        // Enter data using BufferReader
        BufferedReader reader = new BufferedReader(
            new InputStreamReader(System.in));

        // Reading data using readLine
        String name = reader.readLine();

        // Printing the read line
        System.out.println(name);
    }
}
```

Input:

Geek

Output:

Auxiliary Space : O(1)

Geek

Note:

To read other types, we use functions like `Integer.parseInt()`, `Double.parseDouble()`. To read multiple values, we use `split()`.

2. Using Scanner Class

This is probably the most preferred method to take input. The main purpose of the Scanner class is to parse primitive types and strings using regular expressions, however, it is also can be used to read input from the user in the command line.

- Convenient methods for parsing primitives (`nextInt()`, `nextFloat()`, ...) from the tokenized input.
- Regular expressions can be used to find tokens.
- The reading methods are not synchronized

To see more differences, please see [this](#) article.

```
// Java program to demonstrate working of Scanner in Java
import java.util.Scanner;

class GetInputFromUser {
    public static void main(String args[])
    {
        // Using Scanner for Getting Input from User
        Scanner in = new Scanner(System.in);

        String s = in.nextLine();
        System.out.println("You entered string " + s);

        int a = in.nextInt();
        System.out.println("You entered integer " + a);
    }
}
```

```
        float b = in.nextFloat();  
        System.out.println("You entered float " + b);  
    }  
}
```

Input:

GeeksforGeeks

12

3.4

Output:

You entered string GeeksforGeeks

You entered integer 12

You entered float 3.4