**ASSIGNMENT-06**  **26/07/2023**

**HOW TO TAKE INPUT FROM BUFFEREDREADER CLASS**

## Java BufferedReader class is used to read the text from a character-based input stream. It can be used to read data line by line by readLine() method. It makes the performance fast. It inherits reader class.

Java BufferedReader class constructors

|  |  |
| --- | --- |
| **Constructor** | **Description** |
| BufferedReader(Reader rd) | It is used to create a buffered character input stream that uses the default size for an  input buffer. |
| BufferedReader(Reader rd, int size) | It is used to create a buffered character input stream that uses the specified size for an  input buffer. |

Java BufferedReader class methods

|  |  |
| --- | --- |
| **Method** | **Description** |
| int read() | It is used for reading a single character. |
| int read(char[] cbuf, int off, int len) | It is used for reading characters into a portion of an [array](https://www.javatpoint.com/array-in-java). |
| boolean markSupported() | It is used to test the input stream support for the mark and reset method. |
| String readLine() | It is used for reading a line of text. |
| boolean ready() | It is used to test whether the input stream is ready to be read. |
| long skip(long n) | It is used for skipping the characters. |
| void reset() | It repositions the stream at a position the mark method was last called on this  input stream. |
| void mark(int readAheadLimit) | It is used for marking the present position in a stream. |
| void close() | It closes the input stream and releases any of the system resources associated  with the stream. |

java BufferedReader Example

inthis example, we are reading the data from the text file testout.txt using Java BufferedReader class.

1. package com.javatpoint;
2. importjava.io.\*;
3. public classBufferedReaderExample {
4. public static voidmain(String args[]) throwsException{
5. FileReader fr=newFileReader(D:\\testout.txt”);
6. BufferedReader br=newBufferedReader(fr);
8. int i;
9. While (i=br.read(char))!=-1){
10. System.out.print(()i);
11. }
12. br.close();
13. fr.close();
14. }
15. }

Here, we are assuming that you have following data in "testout.txt" file: welcome to javaTpoint

Output:

Welcome to javapoint.

In this example, we are connecting the BufferedReader stream with the inputstreamreader stream for reading the line by line data from the keyboard

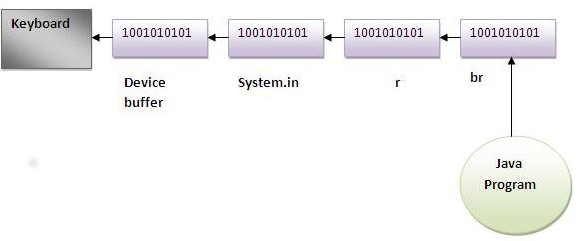
1. packagecom.javatpoint;
2. importjava.io.\*;
3. public class BufferedReaderExample{
4. public static void main(String args[])throwsException{
5. InputStreamReader r=newInputStreamReader(System.in);
6. BufferedReader br=newBufferedReader(r);
7. System.out.println(“Enter your name”);
8. String name=br.readLine();
9. System.out.println(”welcome”+name);
10. }
11. }

Output:

Enter your name

Nakul Jain

Welcome Nakul Jain



Another Example of reading data from console until user writes stop

In this example, we are reading and printing the data until the user prints stop.

1. packagecom.javatpoint;
2. importjava.io.\*;
3. public classBufferedReaderExample{
4. public static void main(String args[])ThrowsException{
5. InputStreamReader r=newInputStreamReader(System.in);
6. BufferedReader br=newBufferedReader(r);
7. String name=;
8. while(!name.equals(stop)){
9. System.out.println(“Enter data);
10. name=br.readLine();
11. System.out.println( “data is “+name);
12. }
13. br.close();
14. r.close();
15. }
16. }

Output:

Enter data: Nakul

data is: Nakul

Enter data: 12

data is: 12

Enter data: stop

data is: stop

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. Here’s an example:BufferedReder reader=new Bufferedreder(new inputStreamReader(System.in));System.

Reading User's Input using BufferedReader class:

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. Here’s an example:

BufferedReader reader = new BufferedReader(new InputStreamReader(System.in));

System.out.print("Enter your name: ");

String name = reader.readLine();

System.out.println("Your name is: " + name);

The BufferedReader class of Java is used to read the stream of characters from the specified source (character-input stream). The constructor of this class accepts an InputStream object as a parameter.

This class provides a method known as readLine() which reads and returns the next line from the source and returns it in String format.

The BufferedReader class doesn’t provide any direct method to read an integer from the user you need to rely on the readLine() method to read integers too. i.e. Initially you need to read the integers in string format.

The parseInt() method of the Integer class accepts a String value, parses it as a signed decimal integer and returns it.

Using this convert the read Sting value into integer and use. In short, to read integer value-form user using BufferedReader class −

* Instantiate an InputStreamReader class bypassing your InputStream object as a parameter.
* Then, create a BufferedReader, bypassing the above obtained InputStreamReader object as a parameter.
* Now, read integer value from the current reader as String using the readLine() method.
* Then parse the read String into an integer using the parseInt() method of the Integer class.

Example

The following Java program demonstrates how to read integer data from the user using the BufferedReader class.

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

class Employee{

   String name;

   int id;

   int age;

   Employee(String name, int age, int id){

      this.name = name;

      this.age = age;

      this.id = id;

   }

   public void displayDetails(){

      System.out.println("Name: "+this.name);

      System.out.println("Age: "+this.age);

      System.out.println("Id: "+this.id);

   }

}

public class ReadData {

   public static void main(String args[]) throws IOException {

      BufferedReader reader =new BufferedReader(new InputStreamReader(System.in));

      System.out.println("Enter your name: ");

      String name = reader.readLine();

      System.out.println("Enter your age: ");

      int age = Integer.parseInt(reader.readLine());

      System.out.println("Enter your Id: ");

      int id = Integer.parseInt(reader.readLine());

      Employee std = new Employee(name, age, id);

      std.displayDetails();

   }

}

Output

Enter your name:

Krishna

Enter your age:

25

Enter your Id:

1233

Name: Krishna

Age: 25

Id: 1233

Java BufferReader class declaration:

Let's see the declaration for Java.io.BufferedReader class:

Public class  BufferedReader extends Reader