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import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.util.Scanner;
import java.util.StringTokenizer;

public class Main {
    static class FastReader {
        BufferedReader br;
        StringTokenizer st;

        public FastReader()
        {
            br = new BufferedReader(
                new InputStreamReader(System.in));
        }

        String next()
        {
            while (st == null || !st.hasMoreElements()) {
                try {
                    st = new StringTokenizer(br.readLine());
                }
                catch (IOException e) {
                    e.printStackTrace();
                }
            }
            return st.nextToken();
        }

        int nextInt() { return Integer.parseInt(next()); }

        long nextLong() { return Long.parseLong(next()); }

        double nextDouble()
        {
            return Double.parseDouble(next());
        }

        String nextLine()
        {
            String str = "";
            try {
                str = br.readLine();
            }
            catch (IOException e) {
                e.printStackTrace();
            }
            return str;
        }
    }
}

```

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    }  
    catch (IOException e) {  
        e.printStackTrace();  
    }  
    return str;  
}  
}  
  
public static void main(String[] args)  
{  
    //This will take the input  
    FastReader sc = new FastReader();  
  
}  
  
}
```