

## The Java™ Tutorials

**Trail:** Essential Classes

**Lesson:** Regular Expressions

*The Java Tutorials have been written for JDK 8. Examples and practices described in this page don't take advantage of improvements introduced in later releases.*

### Test Harness

This section defines a reusable test harness, [RegexTestHarness.java](#), for exploring the regular expression constructs supported by this API. The command to run this code is `java RegexTestHarness`; no command-line arguments are accepted. The application loops repeatedly, prompting the user for a regular expression and input string. Using this test harness is optional, but you may find it convenient for exploring the test cases discussed in the following pages.

```
import java.io.Console;
import java.util.regex.Pattern;
import java.util.regex.Matcher;

public class RegexTestHarness {

    public static void main(String[] args){
        Console console = System.console();
        if (console == null) {
            System.err.println("No console.");
            System.exit(1);
        }
        while (true) {

            Pattern pattern =
                Pattern.compile(console.readLine("%nEnter your regex: "));

            Matcher matcher =
                pattern.matcher(console.readLine("Enter input string to search: "));

            boolean found = false;
            while (matcher.find()) {
                console.format("I found the text" +
                    " \"%s\" starting at " +
                    "index %d and ending at index %d.%n",
                    matcher.group(),
                    matcher.start(),
                    matcher.end());
                found = true;
            }
            if(!found){
                console.format("No match found.%n");
            }
        }
    }
}
```

Before continuing to the next section, save and compile this code to ensure that your development environment supports the required packages.