Regexes in programs

They're used in text editors and in implementations of programming languages, for parsing and syntax highlighting, for extraction of useful information from files and web sites.

Program with a regular expression

We assume that login can contain any Latin letter, a number, the underscore character _, and the dollar sign \$. The length must be no less than 5 characters and no more than 12 characters.

There is one additional feature: we should ignore all whitespace characters in the beginning and the end of the input string.

```
import java.util.Scanner;
class CheckLoginProblem {
  public static void main(String[] args) {
    /* The scanner object to read data from the standard input */
    Scanner scanner = new Scanner(System.in);
    /* The common pattern for valid logins */
    String loginRegex = "\\s*[a-zA-Z0-9_$]{5,12}\\s*";
    /* The read string which may be a login */
    String mayBeLogin = scanner.nextLine();
    boolean isLogin = mayBeLogin.matches(loginRegex);
    System.out.println(isLogin);
    }
}
```

Remember, the regex "\\s*" is a very useful practical tool for finding whitespace characters. It's preferable to use this shorthand instead of directly typing " ".

```
The input-output pair 1: testuser7 true
The input-output pair 2: test false
```

The input-output pair 3:

user!!!

false

The input-output pair 4:

\$test_user

true