

Matching Entire Strings

```
Pattern p = Pattern.compile("a*b");  
Matcher m = p.matcher("aaaaab");  
boolean b = m.matches();
```

Finding Matching Sub-strings

```
Pattern p = Pattern.compile("\\w+");  
Matcher m = p.matcher("this is a test");  
while (m.find()) {  
    String matchStr = m.group();  
    int matchStart = m.start();  
    int matchEnd = m.end();  
}
```

Example Regular Expressions

Any string (zero or more of any character)

.*

Any non-empty string (one or more of any character)

.+

Integer

-?\d+

Java identifier

`[a-zA-Z_]\w*`

Java file name

`[a-zA-Z_]\w*\.java`

Integer variable assignment

`[a-zA-Z_]\w*\s*=\s*-?\d+;`

CS Requirement

`CS (345|360)`

Many email addresses

`[_a-z0-9-]+(\.[_a-z0-9-]+)*@[a-z0-9-]+(\.[a-z0-9-]+)*(\.[a-z]{2,4})`