### Syntax templates

```java
if (test) {
    statement(s);
}
if (test) {
    statement(s);
} else {
    statement(s);
}
if (test) {
    statement(s);
} else if (test) {
    statement(s);
} else {
    statement(s);
}
for (initialization; test; update) {
    statement(s);
}
while (condition) {
    statement(s);
}
public static void name(parameters) {
    statement(s);
}
public static type name(parameters) {
    statement(s);
    ...
    return expression;
}
```

### Math Method | Description
--- | ---
Math.abs(value) | absolute value
Math.min(v1, v2) | smaller of two values
Math.max(v1, v2) | larger of two values
Math.round(value) | nearest whole number
Math.pow(b, e) | b to the e power

### Random Method | Description
--- | ---
nextInt(max) | random integer from 0 to max-1

**Construction Examples**
Random r = new Random();
Scanner console = new Scanner(System.in);

### String Method | Description
--- | ---
contains(str) | true if this string contains the other's characters inside it
endsWith(str), startsWith(str) | true if this string starts/ends with the other's characters
equals(str) | true if this string is the same as str
equalsIgnoreCase(str) | true if this string is the same as str, ignoring capitalization
indexOf(str) | index in this string where given string begins (-1 if not found)
length() | number of characters in this string
substring(i, j) | characters in this string from index i (inclusive) to j (exclusive)
substring(i) | characters in this string from index i (inclusive) to end
toLowerCase(), toUpperCase() | a new string with all lowercase or uppercase letters
charAt(i) | returns char at index i

### Scanner Method | Description
--- | ---
nextInt() | read/return token as int
nextDouble() | read/return token as double
next() | read/return token as String

### Operator | Description
--- | ---
< | less than
<= | less than or equal
> | greater than
>= | greater or equal
== | equal
!= | not equal
&& | logical and
|| | logical or
! | logical not