Looping

Looping lets us execute the code a multiple number of times.

Java supports several statements for looping, or executing code repetitively.

Java supports three statements for looping

Statements	Explanation
for	The for loop is more complex to set up but is commonly used when you are iterating over a set of values.
while	The while loop executes until a specified condition becomes false.
do while	The do while loop always executes at least one and continues until a specified condition becomes false.

The for statement

The **for statement** is often referred to as the for loop.

It repeatedly loops something until a condition is satisfied.

The for statement

```
for (init; expression; increment) {
    // block of statements
}
```

There are three parts to the basic for statement's declaration.

These are declared in parentheses, after the for keyword, and are separated by semi-colons.

The for statement

```
for (init; expression; increment) {
    // block of statements
}
```

These parts are all optional and consist of the following:

- The initialization section declares or sets state, usually declaring and initializing a loop variable, before the loop begins processing.

- The expression section, once it becomes false, will end the loop processing.

- The increment section is executed after the expression is tested, and is generally the place where the loop variable is incremented.

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Mini Challenge

Using a new for statement, call the calculateInterest method with the dollar amount of 100.

And this time, use the interest rates between 7.5 and 10, but increment by a quarter of a percent each time, meaning 0.25 percent.

And print the results to the console window.

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The break statement

A break statement transfers control out of an enclosing statement.

We've seen the break statement in the switch statement, but it can also be used in a loop.