

# Looping

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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

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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

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

It repeatedly loops something until a condition is satisfied.

# The for statement

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```
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

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```
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.

# Mini Challenge

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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.

# The break statement

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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.