

Part 4: Manipulating Strings

Exercise Instructions

In this part of the challenge, you're going to practice using strings to give some output to the user and show them what the program's doing.

Step 1: Update the Code

Uppercase the app's title, add a new line after and print out the input parameter vlaues and what they are and the output value, formatting it to 2 decimal places.

- Transform the app's title to uppercase.
- Add a new line after the app's title (a no-input call to `System.out.println()` will do this).
- After the input variables have been defined, print out there values so it looks something like this:

```
Calculating loan based on:  
Initial Amount:    $100  
Number of years:   5  
Interest Rate:     10%
```

- After the year 5 value has been calculated - this is the final value don't forget - print out the final total amount repayable. It should look something like this:

```
Total Amount Due: $161.05
```

Hint: `Double.toString()` will convert a double to a String which you can then format. You might like to use: `substring` and the `indexOf` methods to ensure you only have two decimal places. (*The idea is to take a number like: 123.45678 and truncate it to look like 123.45, having just two numbers after the decimal point*).

Also, if you need to work on the formatting to 2 decimal places by a bit of trial and error (everyone does this, there's no shame in it!) - don't forget: you can use the expression evaluation window when in debug mode. So just set a break point at a point where you have the variables you want to use in the expression in scope, then hit ALT+F8 (or **Run > Evaluate Expression...** from IDEA's menu). You can then enter expressions or fragments of code to have them evaluated. (For example, this can be useful when working out any indexes you might need in the substring call).

Step 2: Run the program

Compile and run the program.

- Right-click the `main` method and select **Run > App.main()**.
- Check that the code runs correctly and prints out what you expect.