

2.5.2 Run the Analysis for Any Year

Steve will probably want to run this analysis for each year, so let's update our code to run for any year, not just 2018.

Our macro needs interactivity; specifically, we want Steve to be able to input the year he wants to run the analysis for. To get his input, we'll use the `InputBox()` command. `InputBox` works like `MsgBox` but contains a text box to get input from the user.

Store the Value from InputBox

We can store the value entered by assigning `InputBox` to a variable. Add the following line of code at the very beginning of a new macro (named `yearValueAnalysis`):

```
yearValue = InputBox("What year would you like to run the analysis on?")
```

Note that even though we're entering a number, `InputBox` will return a value with a string data type. Luckily, the lines of code we'll change already treat the year as a string.

Replace Hard-Coded Values

In this macro, there are three lines of code that depend on the year; let's change all of those to use the `yearValue` variable instead. The first line is:

```
Range("A1").Value = "All Stocks (2018)"
```

To change this from assigning a hard-coded string literal to using the dynamic value stored in `yearValue`, we need to build the string in pieces. The tool to do this is **concatenation**.

Concatenation refers to the process of joining two or more strings together. In VBA, we can concatenate strings using the "+" operator. The new line will read:

```
Range("A1").Value = "All Stocks (" + yearValue + ")"
```

There are two other lines where we need to replace the hard-coded year value. These lines activate the worksheet with the stock data: first to get the row count, and then inside the `for` loop to make sure we're in the right worksheet. Those lines should now both read:

```
Sheets(yearValue).Activate
```

NOTE

Make sure to leave the initial `.Activate` in the macro as-is: `Sheets("All Stocks Analysis").Activate`.

Run the Macro

You're done. Go ahead and run the macro for both years to make sure that it's working correctly.

ADD/COMMIT/PUSH

You know the drill. Push your changes to the "stocks-analysis" repository in GitHub.

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