



# Getting Real with VBA

Data Boot Camp  
Lesson 2.3



# Words of Advice

# Advice #1

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There is no cram.





## Advice #2

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If you ever spend more than 10 hours on homework in a week without seeing progress, ask for help!





## Advice #3

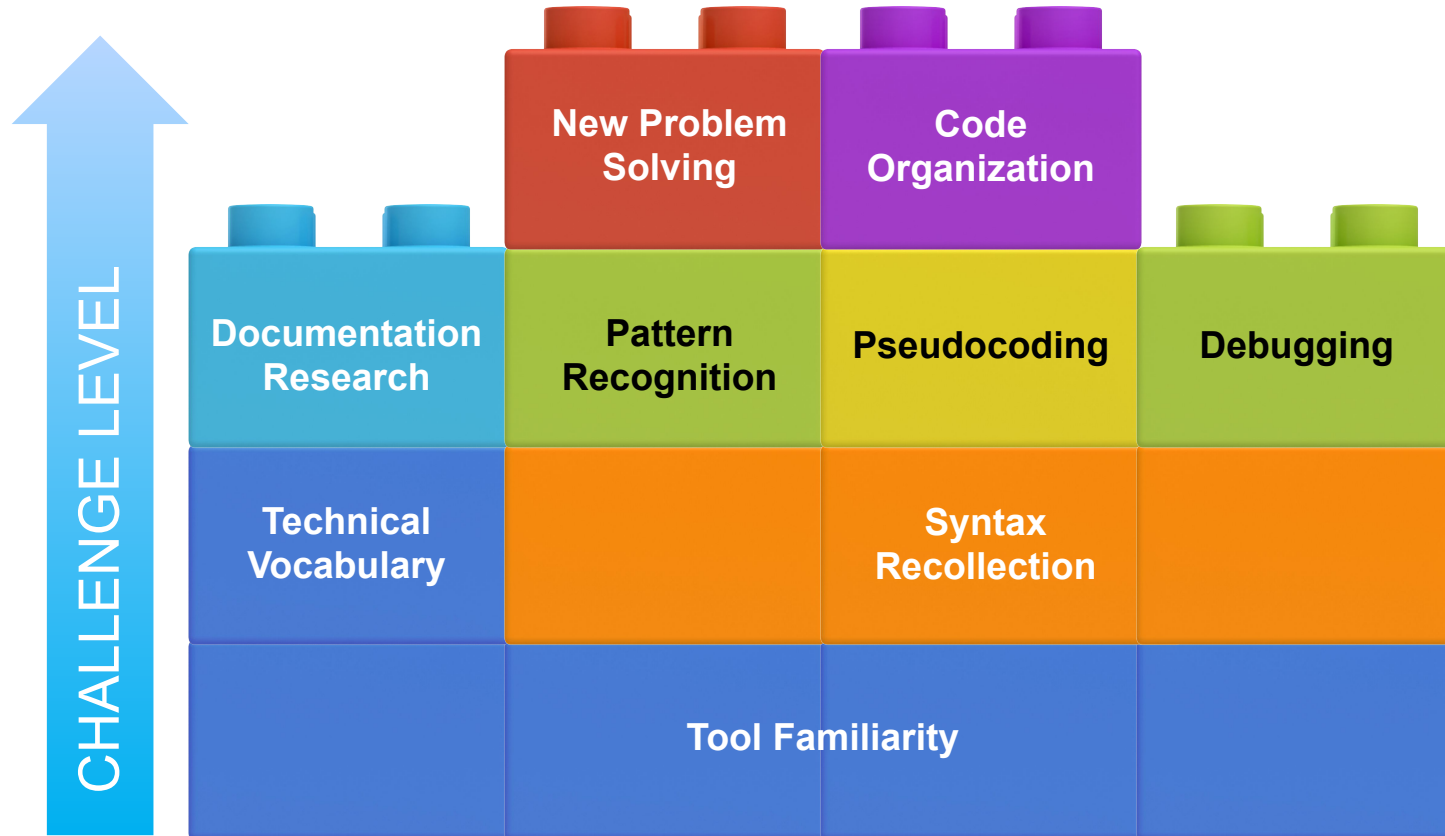
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**Study the right way.**



# Study the Right Way

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**Questions?**

# Refresher















# Explain to a Baby

What is a **for loop**?



# What Will This Code Do?

```
Sub QuickLoop()  
    For i = 1 to 3  
        MsgBox(Cells(i, 1))  
    Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br> | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>    | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>   | Ron<br>      | Mateo<br>    |
| 4 | John<br>   | Lakshmi<br> | Adhira<br>  |

# What Will This Code Do?

When:

`i = 1`

```
Sub QuickLoop()  
  For i = 1 to 3  
    MsgBox(Cells(i, 1))  
  Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br><code>i = 1</code><br> | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>                          | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>                         | Ron<br>      | Mateo<br>    |
| 4 | John<br>                         | Lakshmi<br> | Adhira<br>  |

# What Will This Code Do?

When:

`i = 2`

```
Sub QuickLoop()  
    For i = 1 to 3  
        MsgBox(Cells(i, 1))  
    Next i  
End Sub
```

|   | A   | B   | C   |
|---|---|---|---|
| 1 | Michael<br>                    | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br><code>i = 2</code><br> | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>                      | Ron<br>      | Mateo<br>    |
| 4 | John<br>                      | Lakshmi<br> | Adhira<br>  |















# What Will This Code Do?

When:

**i = 3**

```
Sub QuickLoop()  
  For i = 1 to 3  
    MsgBox(Cells(i, 1))  
  Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br>               | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>                  | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br><b>i = 3</b><br> | Ron<br>      | Mateo<br>    |
| 4 | John<br>                 | Lakshmi<br> | Adhira<br>  |

# What Will This Code Do?

Not going to:

`i = 4`

```
Sub QuickLoop()  
    For i = 1 to 3  
        MsgBox(Cells(i, 1))  
    Next i  
End Sub
```

|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br>                     | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>                        | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br><code>i = 3</code><br> | Ron<br>      | Mateo<br>    |
| 4 | John<br>                       | Lakshmi<br> | Adhira<br>  |

# Explain to a Baby













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What is a **nested** for loop?



# What Will This Code Do?

```
Sub QuickLoop()  
    For i = 1 to 4  
        For j = 1 to 3  
            MsgBox(Cells(i, j))  
        Next j  
    Next i  
End Sub
```

|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br> | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>    | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>   | Ron<br>      | Mateo<br>    |
| 4 | John<br>   | Lakshmi<br> | Adhira<br>  |















# What Will This Code Do?

When:

**i = 1**   **j = 1**

```
Sub QuickLoop()  
    For i = 1 to 4  
        For j = 1 to 3  
            MsgBox(Cells(i, j))  
        Next j  
    Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br><b>i = 1</b><br><b>j = 1</b><br> | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>                                    | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>                                   | Ron<br>      | Mateo<br>    |
| 4 | John<br>                                   | Lakshmi<br> | Adhira<br>  |

# What Will This Code Do?

When:

**i = 1**   **j = 2**

```
Sub QuickLoop()  
    For i = 1 to 4  
        For j = 1 to 3  
            MsgBox(Cells(i, j))  
        Next j  
    Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br><b>i = 1</b><br> | Luis<br><b>j = 2</b><br> | Jin Yong<br> |
| 2 | Evan<br>                    | Mariah<br>               | Ricky<br>    |
| 3 | Jamie<br>                   | Ron<br>                  | Mateo<br>    |
| 4 | John<br>                   | Lakshmi<br>             | Adhira<br>  |

# What Will This Code Do?

When:

`i = 1`   `j = 3`

```
Sub QuickLoop()  
  For i = 1 to 4  
    For j = 1 to 3  
      MsgBox(Cells(i, j))  
    Next j  
  Next i  
End Sub
```













|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br><code>i = 1</code><br> | Luis<br>     | Jin Yong<br><code>j = 3</code><br> |
| 2 | Evan<br>                          | Mariah<br>   | Ricky<br>                          |
| 3 | Jamie<br>                         | Ron<br>      | Mateo<br>                          |
| 4 | John<br>                         | Lakshmi<br> | Adhira<br>                        |

# What Will This Code Do?

When:

**i = 2**   **j = 1**

```
Sub QuickLoop()  
  For i = 1 to 4  
    For j = 1 to 3  
      MsgBox(Cells(i, j))  
    Next j  
  Next i  
End Sub
```

|   | A   | B   | C   |
|---|---|---|---|
| 1 | Michael<br>                              | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br><b>i = 2</b><br><b>j = 1</b><br> | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br>                                | Ron<br>      | Mateo<br>    |
| 4 | John<br>                                | Lakshmi<br> | Adhira<br>  |















# What Will This Code Do?

When:

**i = 2**   **j = 2**

```
Sub QuickLoop()  
    For i = 1 to 4  
        For j = 1 to 3  
            MsgBox(Cells(i, j))  
        Next j  
    Next i  
End Sub
```













|   | A   | B   | C   |
|---|---|---|---|
| 1 | Michael<br>              | Luis<br>                   | Jin Yong<br> |
| 2 | Evan<br><b>i = 2</b><br> | Mariah<br><b>j = 2</b><br> | Ricky<br>    |
| 3 | Jamie<br>                | Ron<br>                    | Mateo<br>    |
| 4 | John<br>                | Lakshmi<br>               | Adhira<br>  |

# What Will This Code Do?

When:

**i = 2**   **j = 3**

```
Sub QuickLoop()  
  For i = 1 to 4  
    For j = 1 to 3  
      MsgBox(Cells(i, j))  
    Next j  
  Next i  
End Sub
```













|   | A   | B   | C  |
|---|---|---|--|
| 1 | Michael<br>              | Luis<br>     | Jin Yong<br>              |
| 2 | Evan<br><b>i = 2</b><br> | Mariah<br>   | Ricky<br><b>j = 3</b><br> |
| 3 | Jamie<br>                | Ron<br>      | Mateo<br>                 |
| 4 | John<br>                | Lakshmi<br> | Adhira<br>               |

# What Will This Code Do?

When:

**i = 3**   **j = 1**

```
Sub QuickLoop()  
    For i = 1 to 4  
        For j = 1 to 3  
            MsgBox(Cells(i, j))  
        Next j  
    Next i  
End Sub
```

|   | A  | B   | C   |
|---|--|---|---|
| 1 | Michael<br>                               | Luis<br>     | Jin Yong<br> |
| 2 | Evan<br>                                  | Mariah<br>   | Ricky<br>    |
| 3 | Jamie<br><b>i = 3</b><br><b>j = 1</b><br> | Ron<br>      | Mateo<br>    |
| 4 | John<br>                                 | Lakshmi<br> | Adhira<br>  |



Questions?