Scripting Practice in VBA

Data Boot Camp

Lesson 2.3

Words of Advice

Advice #1

There is no cram.

Advice #2

If you ever spend more than 10 hours on the Challenge in a week without noting progress, ask for help!

Advice #3

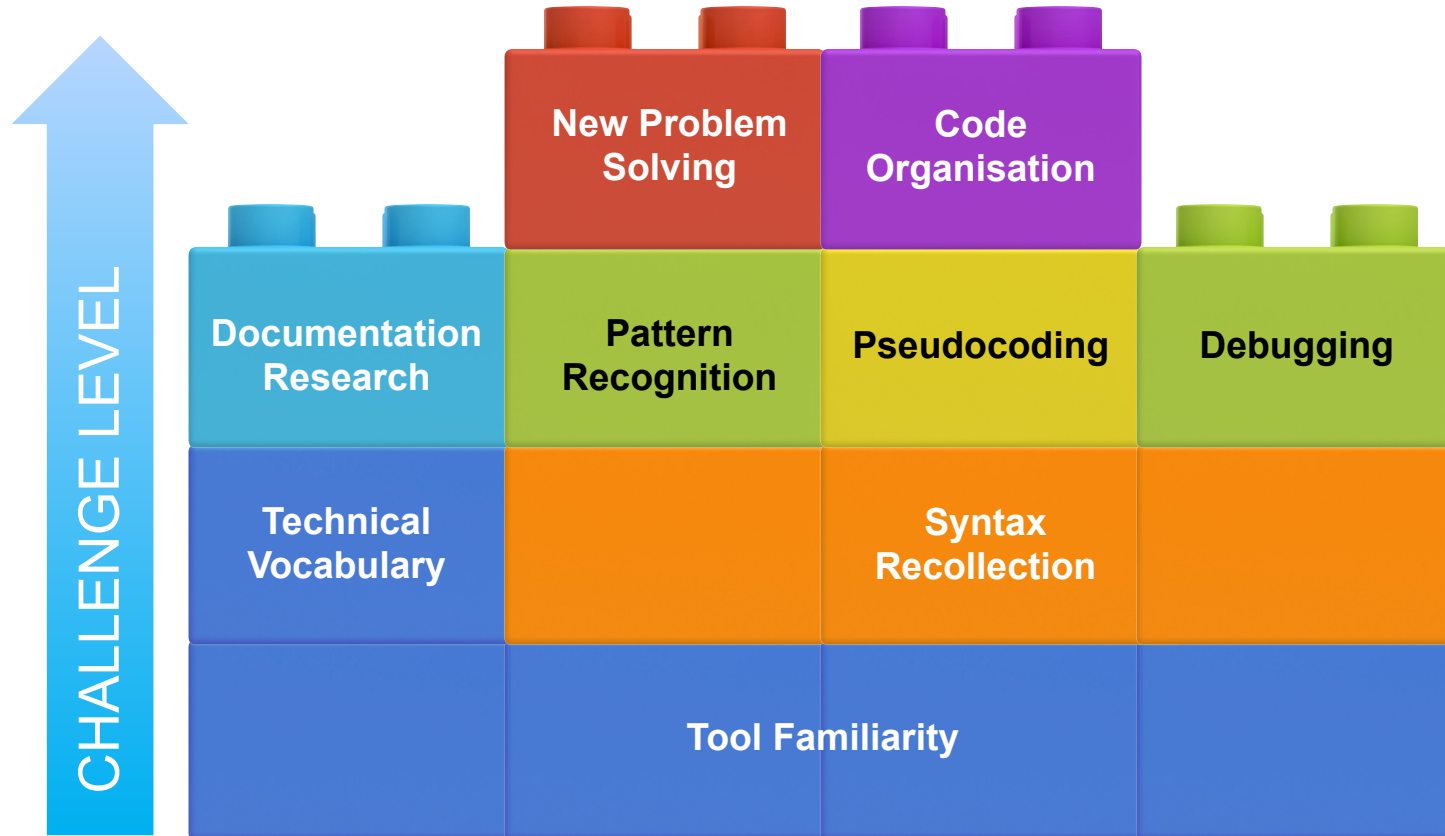Study efficiently.

Study Efficiently

CHALLENGE LEVEL

Documentation Research

New Problem Solving

Code Organisation

Pattern Recognition

Pseudocoding

Debugging

Technical Vocabulary

Syntax Recollection

Tool Familiarity

Questions?

Refresher

Explain to a Baby

What is a for loop?

What Will This Code Do?

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

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

What Will This Code Do?

When:

```
i = 1
```

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

	A	B	C
1	Michael i = 1	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

When:

`i = 2`

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

	A	B	C
1	Michael	Luis	Jin Yong
2	Evan i = 2	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

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	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie i = 3	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

Not going to:
i = 4

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

	A	B	C
1	Michael	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie i = 3	Ron	Mateo
4	John	Lakshmi	Adhira

Explain to a Baby

What is a nested for loop?

What Will This Code Do?

```vba
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	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

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 `i = 1` `j = 1`	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

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 i = 1	Luis j = 2	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

When:

`i = 1`   `j = 3`

```vba
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 i = 1	Luis	Jin Yong j = 3
2	Evan	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

When:

`i = 2` `j = 1`

```vba
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	Luis	Jin Yong
2	Evan i = 2 j = 1	Mariah	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

When:

`i = 2` `j = 2`

```vba
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	Luis	Jin Yong
2	Evan i = 2	Mariah j = 2	Ricky
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

What Will This Code Do?

When:

```
i = 2    j = 3
```

```vba
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	Luis	Jin Yong
2	Evan i = 2	Mariah	Ricky j = 3
3	Jamie	Ron	Mateo
4	John	Lakshmi	Adhira

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	Luis	Jin Yong
2	Evan	Mariah	Ricky
3	Jamie i = 3 j = 1	Ron	Mateo
4	John	Lakshmi	Adhira

Questions?