Programming with M-Files: While-Loop Drill Exercises*

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Abstract

This module provides several simple exercises designed to test and increase your understanding of while loops in m-files.

1 Some While Loop Exercises

Exercise 1 *(Solution on p. 3.)*

How many times will this loop print 'Hello World'?

```
n = 10;
while n > 0
    disp('Hello World')
    n = n - 1;
end
```

Exercise 2 *(Solution on p. 3.)*

How many times will this loop print 'Hello World'?

```
n = 1;
while n > 0
    disp('Hello World')
    n = n + 1;
end
```

Exercise 3 *(Solution on p. 3.)*

What values will the following code print?

```
    a = 1
while a < 100
    a = a*2
end
```

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Exercise 4 ***(Solution on p. 3.)***

What values will the following code print?

```
a = 1;
n = 1;
while a < 100
    a = a*n
    n = n + 1;
end
```

Solutions to Exercises in this Module

Solution to Exercise (p. 1)
10 times.
Solution to Exercise (p. 1)
This loop will continue to print 'Hello World' until the user stops the program. You can stop a program by holding down the 'Ctrl' key and simultaneously pressing the 'c' key.
Solution to Exercise (p. 1)

```
    a =
     1
a =
     2
a =
     4
a =
     8
a =
    16
a =
    32
a =
    64
a =
   128
```

Solution to Exercise (p. 2)

```
a =
     1
a =
     2
a =
     6
a =
    24
a =
   120
```