# Cs005 Final Study Guide

For the first eight questions, assume the following variables have been initialized in the matlab workspace:

```
>> BAge = 12;
>> GAge =7;
 >> BName = 'Joe'
>> GName = 'joanne'
```

1. What does the expression: **`BAge + GAge * 2`** evaluate to?

| | | |
|---|---|---|
| A) 38 | B) 26 | C) 2 |
| D) Inf | E) NaN | |

2. What does the expression: **`BAge + GAge / GAge`** evaluate to?

| | | |
|---|---|---|
| A) 13 | B) NaN | C) Inf |
| D) 2.71 | E) 0 | |

3. What does the expression: **`BAge / (GAge - GAge)`** evaluate to?

| | | |
|---|---|---|
| A) "Error" | B) 1 | C) Inf |
| D) 0 | E) NaN | |

4. What does the expression: **`(BAge - BAge) / (GAge - GAge)`** evaluate to?

| | | |
|---|---|---|
| A) 0 | B) 1 | C) Inf |
| D) -Inf | E) NaN | |

5. What does the expression: **`BName(2) == GName(2)`** evaluate to?

| | | |
|---|---|---|
| A) 1 | B) 0 | C) 'o' |
| D) Inf | E) Error: Expression or statement is incorrect--possibly unbalanced | |

6. What does the expressio: **`BName(1) == GName(1)`** evaluate to?

| | | |
|---|---|---|
| A) 1 | B) 0 | C) 'J' |
| D) 'j' | E) NaN | |

7. What does the expression: **`sort(GName)`** evaluate to?

| | | |
|---|---|---|
| A) aemGN | B) GNaem | C) **`GName`** |
| D) Error: Expression or statement is incorrect--possibly unbalanced | E) aejnno | |

8. What does the expression: **`upper(BName)`** evaluate to?

| | | |
|---|---|---|
| A) BNAME | B) joe | C) JOE |
| D) Error: Expression or statement is incorrect--possibly unbalanced | E) jOE | |

(Expect two new questions on legal variable/function names)

9. Which variable name below is legal?

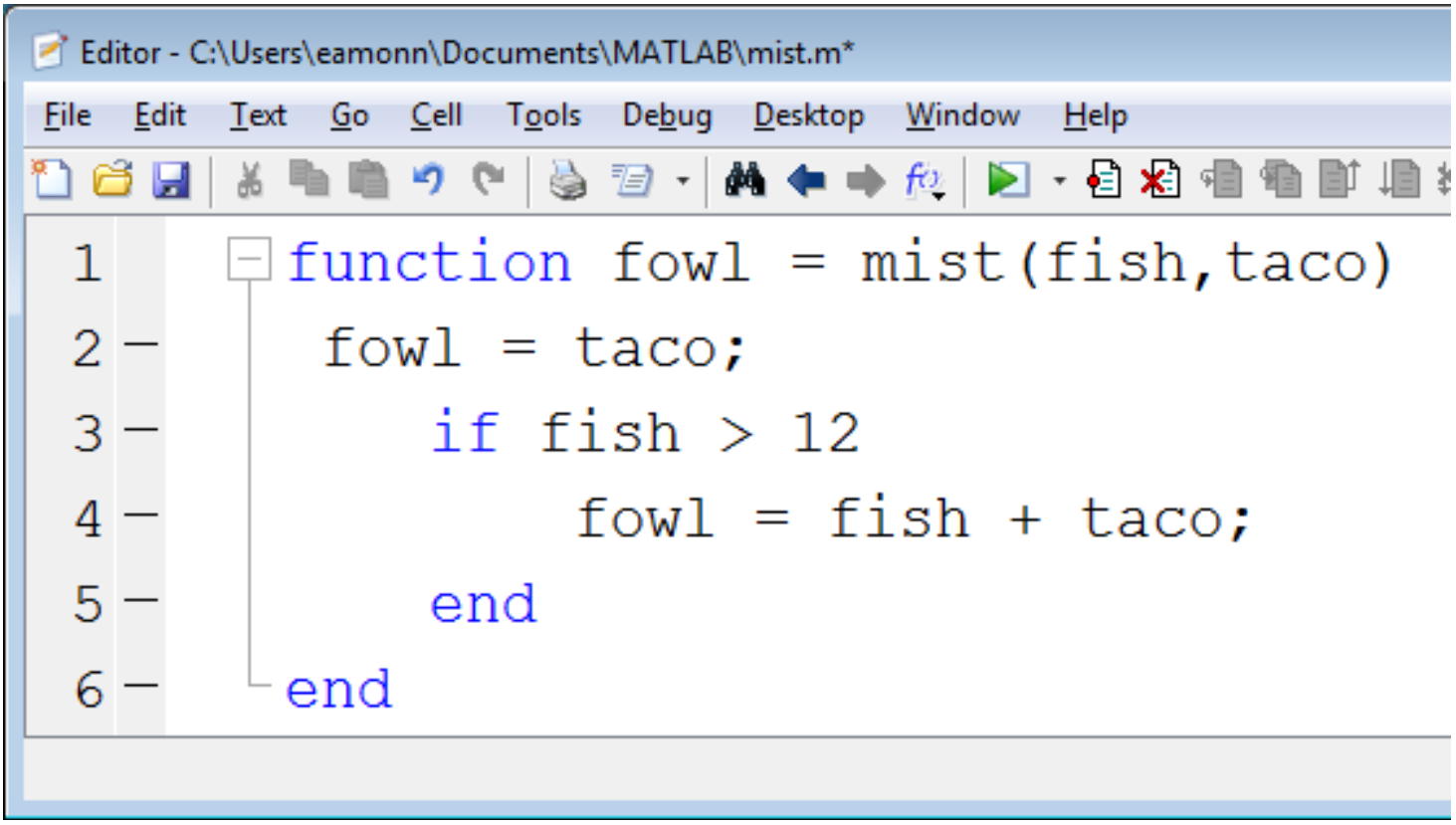
| | | |
|---|---|---|
| A) 2legit2quit | B) HammerTime | C) M.C.Hammer |
| D) U Can't Touch This | E) U Cant Touch This | |

10. Which variable name below is legal?

| | | |
|---|---|---|
| A) Vanilla-Ice | B) @ice | C) @ICE |
| D) Ice | E) 2Iced | |

(Expect 5 to 10 question that ask you to trace code with different arguments)

Use the function below to answer the next set of questions.




What value is assigned to **ans** in the code below. In some cases the answer may be "Error: Unexpected MATLAB expression."

11. `>> ans = mist(10,10)`

| | | |
|---|---|---|
| A) 10 | B) 20 | C) 100 |
| D) "Error: Unexpected.. | E) NaN | |

12. `>> ans = mist(50,10)`

| | | |
|---|---|---|
| A) 10 | B) 20 | C) 50 |
| D) 60 | E) NaN | |

13.**>> ans = mist(10,50)**

| | | |
|---|---|---|
| A) 10 | B) 20 | C) 50 |
| D) 60 | E) “fish taco” | |

14.**>> ans = mist(13,50)**

| | | |
|---|---|---|
| A) 13 | B) 50 | C) 63 |
| D) “Error: Unexpected.. | E) “taco fish” | |

15.**>> ans = mist(floor(12.5),99.5)**

| | | |
|---|---|---|
| A) 12.5 | B) 12 | C) 13 |
| D) 99.5 | E) 99 | |

Expect a question that tests if you understand how to swap to numbers.

**********

Look at this code:

```
>> X = [];
>> X = [X 7];
>> X = [X 7];
```

What is the value of X now? Expect some questions that test your understanding of this.

**********

Look at this code:

```
>> Y = 3;
>> Y = [2 Y];
>> Y = [Y 9];
```

What is the value of Y now? Expect some questions that test your understanding of this.

**********

Assume that Len holds the length of a string, A.

Look at this loop:

```
for i = 1 : Len
    disp( A(i) );
end
```

and this loop

```
for i = 1 : Len
    disp( A(Len + 1- i) );
end
```

What does each string do, say when the string A is 'fink'

**********

What does this code assign to X?

```
X = [];
```

What about this?

```
X = [1 9];
```

What about this?

```
X = [1 : 9];
```

What about this?

```
X = [ [1 9] [1 9] ];
```

What about this?

```
X = [ [1 2] [ 2 1] [ 1 6] ];
```

What about this?

```
X = ['radar' , 'radar'];
```

What about this?

```
X = ['radar' , '    ' ,'radar'];
```

What about this?

```
X = ['radar' , num2str(17)];
```