

**Purpose:** Error Identification

**Learning outcomes:** 1, 2 and 3

**Time:** submit before 5pm Friday of Week 9.

**Resources:** MyLO: lecture notes and tutorial materials

**Description:**

*You've been given some code that doesn't work. NASA was testing rockets and a certain number of them fail, and the code is supposed to allow an operator to enter rocket numbers that fail. The output would then indicate which rockets fail.*

**Task:**

Your task is to find the errors in the code below - the errors might be syntax errors or runtime errors (for example, an undefined variable error is an example of a runtime error as it only occurs when the code tries to refer to the variable's value). You do not have to type the program in or get it running, you only have to indicate where the errors are. **There are eight errors to find.**

In a plain text document (e.g. notepad or textedit) , for each error:

1. Identify the line number where the error occurs
2. Specify what the actual error is

*Note that where an error occurs, there's only one error on that line of code*

**Code:**

```
1 frequency = [0,0,0,0,0,0,0,0,0,0
2
3 number = int(input("Please enter a number between 1 and 10:"))
4
5 while number != 0
6     frequency[numbers - 1] += 1
7     number = int(input("Please enter a number between 1 and 10:"))
8
9
10 print()
11 print("Determining the frequency of numbers entered:")
12
13 count = 1
14 for item in freqncy:
15     if item != 0
16         print("Number: %2d, frequency: %2d" % (count, item))
17     count += 1
```

**Example output:**

An example run (of corrected code) might look like:

```
Please enter a number between 1 and 10: 1
Please enter a number between 1 and 10: 10
Please enter a number between 1 and 10: 1
Please enter a number between 1 and 10: 3
Please enter a number between 1 and 10: 5
Please enter a number between 1 and 10: 10
Please enter a number between 1 and 10: 0
```

```
Determining the frequency of numbers entered:
```

```
Number: 1, frequency: 2
Number: 3, frequency: 1
Number: 5, frequency: 1
Number: 10, frequency: 2
```

**Example submission:**

The following is an example of the format of the file you must submit.

```
Error Number   Line Number   Error Description
1              Line 1       missing ] at end of list
...etc
```

**Submission Details**

Upload the following to the MyLO submission folder for this task:

1. The text file containing your answers

**Assessment Criteria**

A completed submission must:

1. Identify all errors correctly