Follow the same guidelines as in Homework 4 for this assignment.

1) (1 pts) Type the following into a script file and run it.

```
clear
a = 1.1;
b = 2.2;
c = 3.3;
if (c == a+b)
    disp('c = a + b')
else
    disp('c not = a + b')
end
```

What output do you get? Why do you think you get this output? You don't need to print this question.

2) (1 pt) Type the following into a script file and run it.

```
clear
if(0)
    disp('The result is false')
elseif(1)
    disp('The result it true')
else
    disp('no result')
end
```

Do you get any syntax errors when you run the script? If not, why are you getting the result that you do? You do not need to print this question.

3) (3 pts) Write a script that will ask the user to input a number and then prints out whether the number is an integer or a floating point number. The `floor` function in MATLAB will be helpful here. Choose two of your own test cases (one integer and one non-integer).

4) (3 pts) Write a script that will ask the user to input an integer and prints out whether the integer is even or odd. The `mod` function in MATLAB will be helpful here. Choose two of your own test cases (one even and one odd).

5) (5 pts) Write a program that combines the two programs above. If you are testing whether a number is even or odd, it doesn't make sense to do the test if the number is not an integer.

Write a script that asks the user to input a number. If the number is not an integer, an appropriate message should be printed out. If the number is an integer, the program should print out whether the integer is even or odd. Test your program for two test cases of your own choosing (one integer, one non-integer).