UNC Charlotte, Department of Electrical and Computer Engineering
ECGR 4101/5101, Fall 2013, Homework #8
(20 points)

Consider the function design below. Your goal is to white box test it. You only need worry about the input values and the resulting value returned. You should fully test the logic using techniques discussed in class. NOTE: You do not need to write the code!!!

1. Write the test plan to unit test this module.
2. Write the test case to unit test the module. The test case should identify all of the inputs and expected outputs.
3. Assuming the function prototype is `int find_x_y_z(int x, int y, intz);` write the test harness function to execute the test plan. Put the results in an integer array that you can examine later.

```
function find_x_y_z
//  Inputs int x, y, z, all between 0 and 200
//  Output int a
//  Using inputs x, y, z, return the value based on our conversion
//  if x, y, or z are not between 0 and 200, return -1, -2, -3, -4, -5, -6,
//     or -7 depending on which inputs were invalid

a=0
Verify x, if not in correct range a=a -1
Verify y, if not in correct range a=a -2
Verify z, if not in correct range a=a -4
If a is negative, return a

if x > y {
   if y>z then a=200
   else a=0
}
else {
   if x>z a=100
   else a=50
}
return a
```