Blackbox Testing

1. What is the difference between Black-Box and White-Box Testing?
2. If -10 <= x <= 10, what are the Normal Boundary Value test cases for x?
3. If -10 <= x <= 10, what are the Robust Boundary Value test cases for x?
4. How many test cases would be required for 10 variables using Robust Multiple-Fault Boundary Value testing?
5. If there are 3 valid value ranges for x and 3 valid value ranges for y, how many valid equivalence classes are there?
6. For No. 5, what is the minimum number of test cases required for Weak Normal Equivalence Class testing?
7. For No. 5, what is the minimum number of test cases required for Strong Robust Equivalence Class testing?
8. Create a Decision Table for testing a login page validation program:
   - The Conditions to allow the user to login are: Valid User ID and Valid Password.
   - The Actions performed are: 1) Display the Home Page, if the User ID and Password are valid and 2) display an error message "Invalid User Credentials" if either the User ID or Password is wrong.

1. Blackbox testing is about the external behavior against the requirements, you look based on outputs. White-box testing tests the actual code itself.
2. The normal Boundary value test cases would be the values right of the edges and just inside the edges with a middle value, so -10, -9, 0, 9, 10
3. The Robust Boundary Value includes the normal, but also tests outside of the range. So, -11, -10, -9, 0, 9, 10, 11
4. Robust BVA has 7 case, so multiple-fault would be 7^10
5. There are 6 valid classes, x has 3, y has 3
6. Both variables have 3 classes so the minimum number of test cases is 3
7. Takes all invalid and valid classes, each variable has 3 valid and 1 invalid class, so 4 per variable. 4x4 = 16 classes
8.

Scenario	User Id	Password	System Behavior
1	Valid	Valid	Login Succeeds, Display home page
2	Valid	Invalid	"Invalid User Credentials"
3	Invalid	Valid	"Invalid User Credentials"
4	Invalid	Invalid	"Invalid User Credentials"