Software Testing

Assignment 2

Lab Exercise

Decision Table - Boundary value analysis program

Design and develop a program in C or Java language to solve the triangle problem defined as follows:

Accept three integers which are supposed to be the three sides of triangle and determine if the three values represent an equilateral triangle, isosceles triangle, scalene triangle, or they do not form a triangle at all.

Derive test cases for your program based on boundary value analysis, execute the test cases and discuss the results.

Test Case Name:
Boundary Value Analysis for triangle problem

Test Data: Enter the 3 Integer Value (a , b And c)

Pre-condition:

$1 \leq a \leq 10$, $1 \leq b \leq 10$ and $1 \leq c \leq 10$ and $a < b + c$, $b < a + c$ and $c < a + b$

Brief Description :

Check whether given value for a equilateral, isosceles , Scalene triangle or can't from a triangle

Algorithm

- Prompt for 3 integers
- Check the range of values *{use validation}*
- Check for triangle type

Case Id	Description	Input Data			Expected Output	Actual Output	Status	Comments
		a	b	c				
1	Enter the min value for a , b and c	1	1	1				
2	Enter the min value for 2 items and min +1 for any one item1	1	1	2				
3	Enter the min value for 2 items and min +1 for any one item1							
4	Enter the min value for 2 items and min +1 for any one item1							
5	Enter the normal value for 2 items and 1 item is min value							
6	Enter the normal value for 2 items and 1 item is min value							
7	Enter the normal value for 2 items and 1 item is min value							
8	Enter the normal Value for a, b and c							
9	Enter the normal value for 2 items and 1 item is max value							
10	Enter the normal value for 2 items and 1 item is max value							
11	Enter the normal value for 2 items and 1 item is max value							
12	Enter the max value for 2 items and max - 1 for any one item							
13	Enter the max value for 2 items and max - 1 for any one item							
14	Enter the max value for 2 items and max - 1 for any one item							
15	Enter the max value for a, b and c							