

Suppose we have a function that takes an input number between 1 and 100 inclusive and returns a corresponding category based on the following conditions:

Category A: if the number is less than or equal to 25

Category B: if the number is greater than 25 and less than or equal to 75

Category C: if the number is greater than 75

Test Data for Boundary Value Analysis

Lower Boundaries:

Test Case 1: Input = 1 (Just above lower boundary)

Test Case 2: Input = 25 (On the lower boundary)

Inner Boundaries:

Test Case 3: Input = 26 (Just below the upper boundary of category A)

Test Case 4: Input = 50 (Midpoint between category A and B)

Test Case 5: Input = 74 (Just below the upper boundary of category B)

Upper Boundaries:

Test Case 6: Input = 75 (On the upper boundary of category B)

Test Case 7: Input = 76 (Just above the upper boundary of category B)

Test Case 8: Input = 100 (Just above the upper boundary)

Test Data for Equivalence Class Partition

Valid Equivalence Classes:

Test Case 1: Input = 15 (Valid for category A)

Test Case 2: Input = 50 (Valid for category B)

Test Case 3: Input = 90 (Valid for category C)

Invalid Equivalence Classes:

Test Case 4: Input = 0 (Below lower boundary)

Test Case 5: Input = 101 (Above upper boundary)