

Define Weightage:

Number of Linked Requirements **(Weight: 5)**: The more requirements a test case is linked to, the higher the weight.

Number of Linked Defects **(Weight: 4)**: A higher number of linked defects increases the weight.

Severity of Linked Defects **(Weight: 3)**: The severity of linked defects contributes to the weight, with higher severity carrying more weight.

Test Case Execution Effort **(Weight: 2)**: The effort required to execute the test case influences the weight.

Define Thresholds for Priorities:

P1 (Priority Score ≥ 80): Test cases with a high priority score fall into this category.

P2 ($60 \leq$ Priority Score < 80): Test cases with a moderate priority score fall into this category.

P3 (Priority Score < 60): Test cases with a low priority score fall into this category.

Calculate Priority Score for Each Test Case:

The priority score is calculated using the formula:

Priority Score = $(5 * \text{Number of Linked Requirements}) + (4 * \text{Number of Linked Defects}) + (3 * \text{Severity of Linked Defects}) + (2 * \text{Test Case Execution Effort})$

Assign Priorities Based on Thresholds:

Test cases are then assigned priorities based on the calculated **priority score**:

If Priority Score is greater than or equal to 80, it is assigned P1.

If Priority Score is between 60 and 80, it is assigned P2.

If Priority Score is less than 60, it is assigned P3.