

## Practical No : 06

**Aim :** To implement a multistage graph for the shortest path .

**Output :**

```
Total Cost: 12
Shortest Path: [1, 3, 5, 8, 9]

=== Code Execution Successful ===
```

**Leetcode :**

<https://leetcode.com/problems/minimum-path-cost-in-a-grid/description/>

The screenshot shows a web browser displaying a LeetCode submission page for the problem "Minimum Path Cost in a Grid". The page is divided into several sections:

- Problem Statement:** A brief description of the problem, including the input grid and the goal of finding the minimum path cost.
- Submission:** A section showing the user's submission details, including the code editor with the solution in C++.
- Test Results:** A section showing the results of the submission, indicating that it passed all test cases.
- Performance:** A section showing the execution time and memory usage of the solution.

The code in the submission section is as follows:

```
int minimumPathCost(vector<vector<int>>& grid, vector<vector<int>>& costs, vector<vector<int>>& next) {
    int n = grid[0].size();
    int m = grid.size();
    int start = 0;
    int end = n - 1;
    int minCost = 0;
    for (int i = 0; i < m; i++) {
        for (int j = 0; j < n; j++) {
            if (i == 0 && j == 0) {
                minCost = grid[i][j];
            } else {
                minCost = grid[i][j] + costs[i][j];
            }
        }
    }
    return minCost;
}
```