

## Shortest path in Directed Acyclic Graph

Given a Directed Acyclic Graph of  $N$  vertices from 0 to  $N-1$  and a 2D Integer array(or vector) `edges[ ][ ]` of length  $M$ , where there is a directed edge from `edge[i][0]` to `edge[i][1]` with a distance of `edge[i][2]` for all  $i$ ,  $0 \leq i$

Find the **shortest** path from **src(0)** vertex to all the vertices and if it is impossible to reach any vertex, then return **-1** for that vertex.

### Example:

#### Input:

```
n = 6, m= 7
edge= [ [0, 1, 2], [0, 4, 1], [4, 5, 4]
, [4, 2, 2], [1, 2, 3], [2, 3, 6], [5, 3, 1] ]
```

#### Output:

```
0 2 3 6 1 5
```

### Your Task:

You don't need to print or input anything. Complete the function **shortest path()** which takes an integer  $N$  as number of vertices, an integer  $M$  as number of edges and a 2D Integer array(or vector) `edges` as the input parameters and returns an **integer array(or vector)**, denoting the list of distance from src to all nodes.

### Constraint:

- $1 \leq n, m \leq 100$

- $0 \leq \text{edge}_{i,0}, \text{edge}_{i,1} < n$

**Expected Time Complexity:**  $O(N+E)$ , where  $N$  is the number of nodes and  $E$  is edges

**Expected Space Complexity:**  $O(N)$