

ACKNOWLEDGMENT

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Roll No.-45

B.Tech CSE-H-IV Sem

Session: 2021-22GEHU, Dehradun

OUTPUT

```
Enter the number of vetices and edges:: 5 6
Enter the edges::
0 1
0 4
1 4
1 2
1 3
2 4
Enter the vertices to find path:: 0 4
Yes path exit
```

OUTPUT

```
Enter the number of vetices and edges:: 9 8
Enter the edges::
0 1
1 2
1 7
2 3
3 5
4 6
4 8
7 8
Yes
```

OUTPUT

```
Enter the number of vetices and edges:: 5 6
Enter the edges::
0 1
0 4
0 3
1 4
2 4
3 4
No Cycle Exist
```

OUTPUT

```
Enter the number of vertices and edges: 5 6
Enter the edges and weights:
0 1 5
0 4 6
2 4 7
1 3 5
2 3 2
3 4 3
Enter the source vertex: 0
0 : 0
0 1 : 5
0 4 3 2 : 11
0 4 3 : 9
0 4 : 6
```

OUTPUT

```
Enter the number of vetices and edges:: 6 7
Enter the edges and weight::
0 1 5
1 5 -3
1 2 -2
2 4 3
3 2 6
3 4 -2
5 3 1
Enter the source: 0
Distances
0 : 0
0 1 : 5
0 1 2 : 3
0 1 5 3 : 3
0 1 5 3 4 : 1
0 1 5 : 2
```

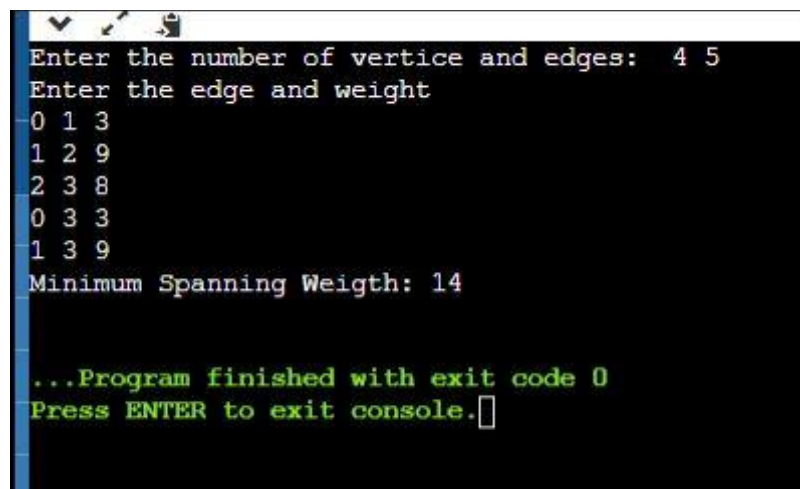
OUTPUT

```
Enter the number of vertices: 6
Enter the edges and weight
1 0 5
0 4 4
0 2 3
2 3 2
3 5 6
4 5 1
Enter the source and destination: 1 5
Enter the value of k: 4
Weight of shortest path from 1 to 5 is: 16
```

OUTPUT

```
Enter the number of vertices: 6
Enter the edges and weight
1 0 5
0 4 4
0 2 3
2 3 2
3 5 6
4 5 1
Enter the souce and destination: 1 5
Enter the value of k: 4
Weight of shortest path from 1 to 5 is: 16
```

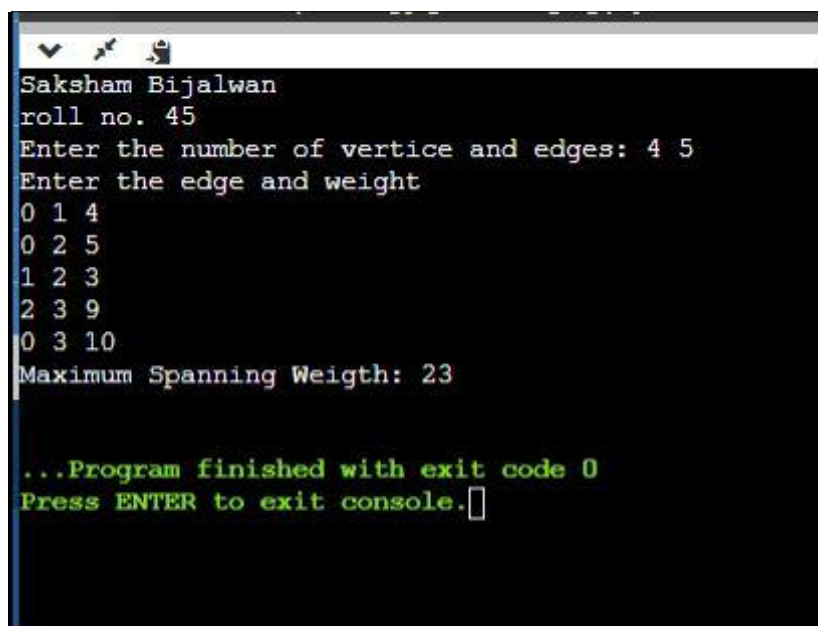

OUTPUT



```
Enter the number of vertice and edges: 4 5
Enter the edge and weight
0 1 3
1 2 9
2 3 8
0 3 3
1 3 9
Minimum Spanning Weigth: 14

...Program finished with exit code 0
Press ENTER to exit console.
```

OUTPUT

A screenshot of a console window with a black background and white text. The window has a title bar with standard Windows icons. The text inside the console shows a program execution log. It starts with the user's name and roll number, followed by prompts for the number of vertices and edges, and then for each edge's endpoints and weight. The program then outputs the maximum spanning tree weight and a completion message.

```
Saksham Bijalwan
roll no. 45
Enter the number of vertice and edges: 4 5
Enter the edge and weight
0 1 4
0 2 5
1 2 3
2 3 9
0 3 10
Maximum Spanning Weigth: 23

...Program finished with exit code 0
Press ENTER to exit console.
```

OUTPUT

```
Saksham Bijalwan
Roll No. 45
Enter the number of vertices and edges: 4 5
0 1 8
0 2 7
1 3 9
1 2 7
2 3 3
Minimum Distances
0 8 7 10
2147483647 0 7 9
2147483647 2147483647 0 3
2147483647 2147483647 2147483647 0

...Program finished with exit code 0
Press ENTER to exit console.
```

OUTPUT

```
Saksham Bijalwan
Roll No. 45
Enter the size of array:: 6
Enter the weights:: 6 10 3 5 1 3
Enter the values:: 6 2 1 8 2 3
Enter the weight of knapsack:: 16
Maximum Value:: 19.3333
Items : Weights
5 : 1
4 : 5
1 : 6
6 : 3
3 : 1

...Program finished with exit code 0
Press ENTER to exit console.
```