

OUTPUT FOR CONNECTED GRAPH

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"D:\AIT\DATA Structure CODES\MST\bin\Debug\MST.exe"
-----MENU-----
1] KRUSKALS ALGORITHM
2] PRIMS ALGORITHM
3] EXIT
Enter Your Choice: 1

Enter Number Of Cities      : 10
Enter Number Of Connections: 16
Enter The First City, Second City and Cost of the Connection:
1 2 4
1 4 1
2 3 4
2 4 4
2 10 10
3 5 2
3 6 1
4 8 5
4 10 6
5 7 2
6 7 3
6 9 5
7 9 3
7 10 4
8 10 2
9 10 3

-----ALL CONNECTIONS-----
      1 4      1
      3 6      1
      3 5      2
      8 10     2
      5 7      2
      7 9      3
      6 7      3
      9 10     3
      7 10     4
      2 3      4
      1 2      4
      2 4      4
      6 9      5
      4 8      5
      4 10     6
      2 10     10

-----CONNECTED CITIES USING KRUSKAL ALGORITHM-----
-----F S      WEIGHT-----
      1 4      1
      3 6      1
      3 5      2
      5 7      2
      8 10     2
      9 10     3
      7 9      3
      2 3      4
      1 2      4

MINIMUM TOTAL COST = 22
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-----MENU-----

- 1] KRUSKALS ALGORITHM
- 2] PRIMS ALGORITHM
- 3] EXIT

Enter Your Choice: 2

Enter Number Of Cities : 10

Enter Number Of Connections: 16

Enter The First City, Second City and Cost of the Connection:

1 2 4
1 4 1
2 3 4
2 4 4
2 10 10
3 5 2
3 6 1
4 8 5
4 10 6
5 7 2
6 7 3
6 9 5
7 9 3
7 10 4
8 10 2
9 10 3

-----CONNECTED CITIES USING PRIMS ALGORITHM-----

-----F	S	WEIGHT-----
1	4	1
1	2	4
2	3	4
3	6	1
3	5	2
5	7	2
7	9	3
9	10	3
10	8	2

MINIMUM TOTAL COST = 22

OUTPUT FOR NOT CONNECTED GRAPH

```
"D:\AIT\DATA Structure CODES\MST\bin\Debug\MST.exe"
MINIMUM TOTAL COST = 22

-----MENU-----
1] KRUSKALS ALGORITHM
2] PRIMS ALGORITHM
3] EXIT
Enter Your Choice: 1

Enter Number Of Cities      : 10
Enter Number Of Connections: 13
Enter The First City, Second City and Cost of the Connection:
1 2 4
1 4 1
2 4 4
2 10 10
3 5 2
3 6 1
4 8 5
4 10 6
5 7 2
6 7 3
6 9 5
7 9 3
8 10 2

-----ALL CONNECTIONS-----
      1  4      1
      3  6      1
      8 10      2
      3  5      2
      5  7      2
      7  9      3
      6  7      3
      2  4      4
      1  2      4
      4  8      5
      6  9      5
      4 10      6
      2 10     10

-----ALL CITIES ARE NOT CONNECTED-----
```

-----ALL CITIES ARE NOT CONNECTED-----

-----MENU-----

- 1] KRUSKALS ALGORITHM
- 2] PRIMS ALGORITHM
- 3] EXIT

Enter Your Choice: 2

Enter Number Of Cities : 10

Enter Number Of Connections: 13

Enter The First City, Second City and Cost of the Connection:

1 2 4

1 4 1

2 4 4

2 10 10

3 5 2

3 6 1

4 8 5

4 10 6

5 7 2

6 7 3

6 9 5

7 9 3

8 10 2

-----ALL CITIES ARE NOT CONNECTED-----

-----MENU-----

- 1] KRUSKALS ALGORITHM
- 2] PRIMS ALGORITHM
- 3] EXIT

Enter Your Choice: 3

-----THANK YOU-----

Process returned 0 (0x0) execution time : 65.208 s

Press any key to continue.

OUTPUT 2

```
"D:\AIT\DATA Structure CODES\MST\bin\Debug\MST.exe"
-----MENU-----
1] KRUSKALS ALGORITHM
2] PRIMS ALGORITHM
3] EXIT
Enter Your Choice: 1

Enter Number Of Cities      : 6
Enter Number Of Connections: 10
Enter The First City, Second City and Cost of the Connection:
1 2 16
1 5 19
1 6 21
2 3 5
2 4 6
3 4 10
5 6 33
5 4 18
6 4 14
6 2 11

-----ALL CONNECTIONS-----
      2  3      5
      2  4      6
      3  4     10
      6  2     11
      6  4     14
      1  2     16
      5  4     18
      1  5     19
      1  6     21
      5  6     33

-----CONNECTED CITIES USING KRUSKAL ALGORITHM-----
-----F  S      WEIGHT-----
      2  3      5
      2  4      6
      6  2     11
      1  2     16
      5  4     18

MINIMUM TOTAL COST = 56
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MINIMUM TOTAL COST = 56

-----MENU-----

- 1] KRUSKALS ALGORITHM
- 2] PRIMS ALGORITHM
- 3] EXIT

Enter Your Choice: 2

Enter Number Of Cities : 6

Enter Number Of Connections: 10

Enter The First City, Second City and Cost of the Connection:

1 2 16

1 5 19

1 6 21

2 3 5

2 4 6

3 4 10

5 6 33

5 4 18

6 4 14

6 2 11

-----CONNECTED CITIES USING PRIMS ALGORITHM-----

-----F	S	WEIGHT-----
1	2	16
2	3	5
2	4	6
2	6	11
4	5	18

MINIMUM TOTAL COST = 56

-----MENU-----

- 1] KRUSKALS ALGORITHM
- 2] PRIMS ALGORITHM
- 3] EXIT

Enter Your Choice: 3

-----THANK YOU-----