```
D:\Java\jdk1.8.0_102\bin\java.exe "-javaagent:D:\IntelliJ IDEA Community
Edition 2019.2\lib\idea_rt.jar=60156:D:\IntelliJ IDEA Community Edition 2019
.2\bin" -Dfile.encoding=UTF-8 -classpath "D:\Java\jdk1.8.0_102\jre\lib\
charsets.jar;D:\Java\jdk1.8.0_102\jre\lib\deploy.jar;D:\Java\jdk1.8.0_102\
jre\lib\ext\access-bridge-32.jar;D:\Java\jdk1.8.0_102\jre\lib\ext\cldrdata.
jar;D:\Java\jdk1.8.0_102\jre\lib\ext\dnsns.jar;D:\Java\jdk1.8.0_102\jre\lib\
ext\jaccess.jar;D:\Java\jdk1.8.0_102\jre\lib\ext\jfxrt.jar;D:\Java\jdk1.8.
0_102\jre\lib\ext\localedata.jar;D:\Java\jdk1.8.0_102\jre\lib\ext\nashorn.
jar;D:\Java\jdk1.8.0_102\jre\lib\ext\sunec.jar;D:\Java\jdk1.8.0_102\jre\lib\
ext\sunjce_provider.jar;D:\Java\jdk1.8.0_102\jre\lib\ext\sunmscapi.jar;D:\
Java\jdk1.8.0_102\jre\lib\ext\sunpkcs11.jar;D:\Java\jdk1.8.0_102\jre\lib\ext
\zipfs.jar;D:\Java\jdk1.8.0_102\jre\lib\javaws.jar;D:\Java\jdk1.8.0_102\jre\
lib\jce.jar;D:\Java\jdk1.8.0_102\jre\lib\jfr.jar;D:\Java\jdk1.8.0_102\jre\
lib\jfxswt.jar;D:\Java\jdk1.8.0_102\jre\lib\jsse.jar;D:\Java\jdk1.8.0_102\
jre\lib\management-agent.jar;D:\Java\jdk1.8.0_102\jre\lib\plugin.jar;D:\Java
\jdk1.8.0_102\jre\lib\resources.jar;D:\Java\jdk1.8.0_102\jre\lib\rt.jar;C:\
Users\Ankit Pandita\Desktop\Project2_GraphAlgo\out\production\
Project2_GraphAlgo" edu.uncc.cci.algods.Main
Select the input file from 1, 2, 3, 4, 5 or 6.
Note: File 1, 2 , 3 and 4 have Undirected Graphs and file 5 and 6  have
Directed Graphs.
6

Choose an action:
1. Display Shortest Path (using Dijkstra's Algorithm)
2. Display Minimal Spanning Tree (using Kruskal's Algorithm)
3. Exit
1

Number of vertices = 9
Number of edges = 15
Selected Graph is Directed.

Applying Dijkstra's Algorithm:
        A   B   C   D   E   F   G   H   I
A       0   2   0   0   10  0   45  0   0
B       0   0   3   0   0   25  0   45  0
C       0   0   0   4   0   0   0   0   45
D       0   0   0   0   5   0   0   39  0
E       0   0   0   0   0   6   0   0   0
F       0   0   0   0   0   0   5   0   0
G       0   0   0   0   0   0   0   4   0
H       0   0   0   0   0   0   0   0   3
I       2   0   0   0   0   0   0   0   0

Source of graph is A

Shortest Path from source:
A -> B = 2
A -> B -> C = 5
A -> B -> C -> D = 9
A -> E = 10
A -> E -> F = 16
A -> E -> F -> G = 21
A -> E -> F -> G -> H = 25
A -> E -> F -> G -> H -> I = 28

Total time taken = 21015 ns
```

```
Choose an action:
1. Display Shortest Path (using Dijkstra's Algorithm)
2. Display Minimal Spanning Tree (using Kruskal's Algorithm)
3. Exit
3

Process finished with exit code 0
```