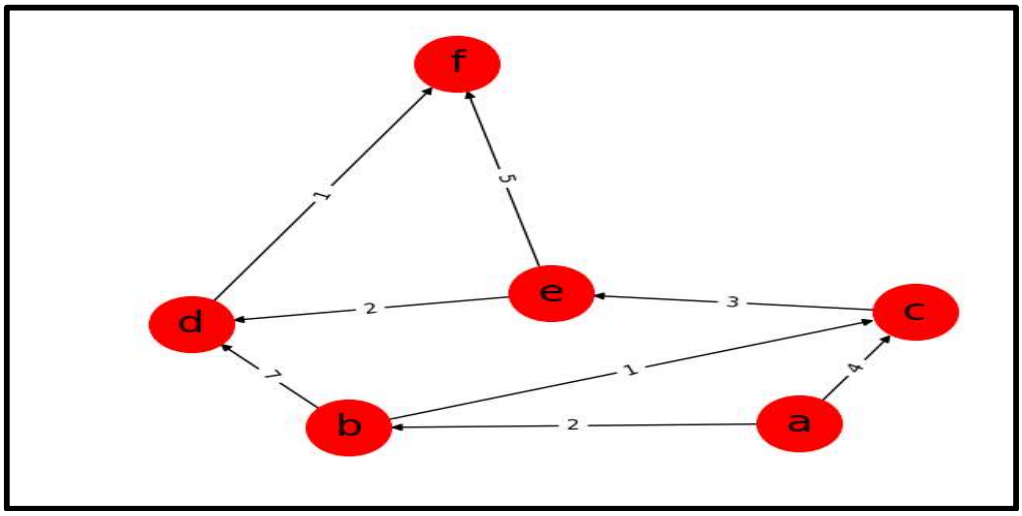
Problem 1 solved using code

Graph 1 plotted by the program

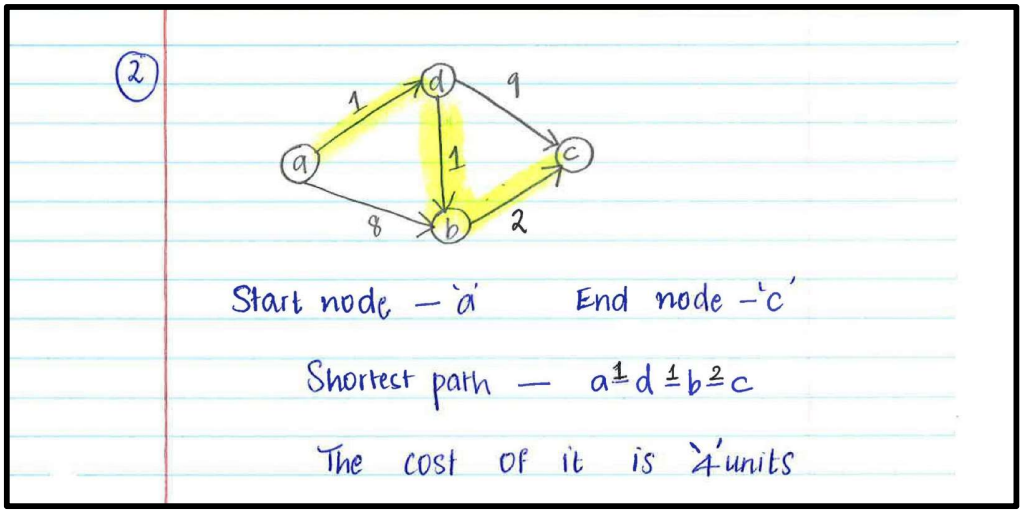


Result 1 from the program

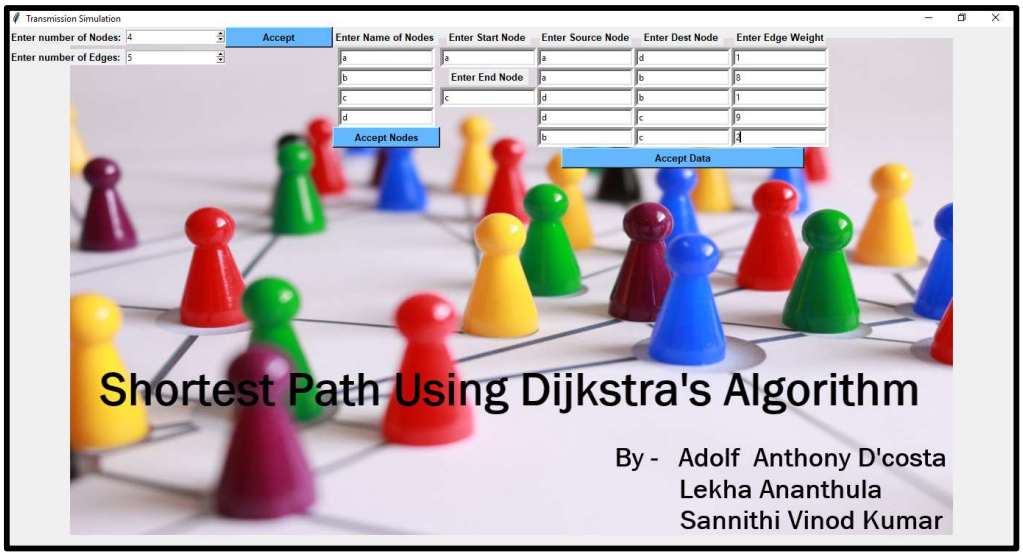
```
1 C:\Users\Adolf\AppData\Local\Programs\Python\Python37-32\
  python.exe "C:/Users/Adolf/Desktop/Maths Project/Maths
  Project.py"
2 [{'path': ['a', 'b', 'c', 'e', 'd', 'f'], 'weight': 9}, {'
  path': ['a', 'b', 'c', 'e', 'f'], 'weight': 11}, {'path
  ': ['a', 'b', 'd', 'f'], 'weight': 10}, {'path': ['a', 'c
  ', 'e', 'd', 'f'], 'weight': 10}, {'path': ['a', 'c', 'e
  ', 'f'], 'weight': 12}]
```

PRACTICAL EXAMPLE 2

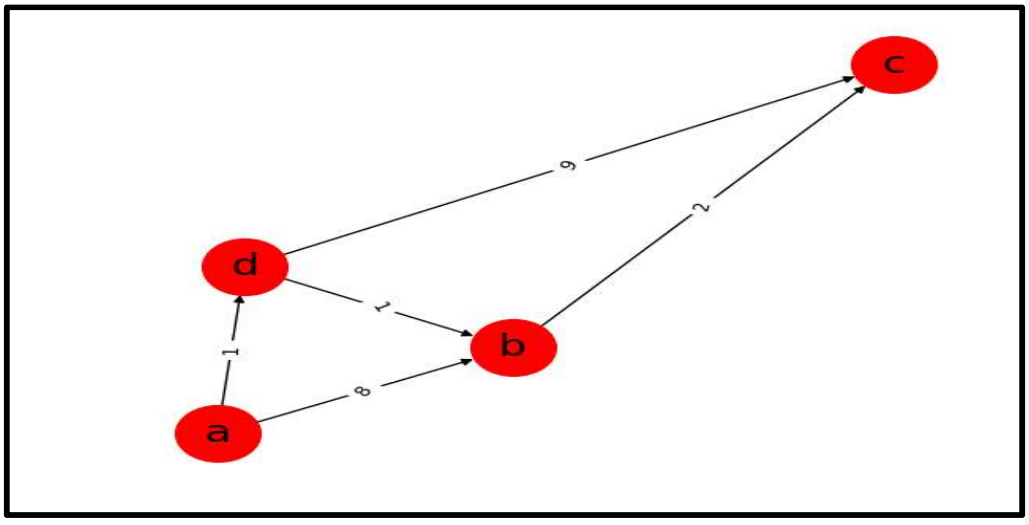
THEORETICALLY EXPLAINED



Problem 2 solved using code



Graph 2 plotted by the program

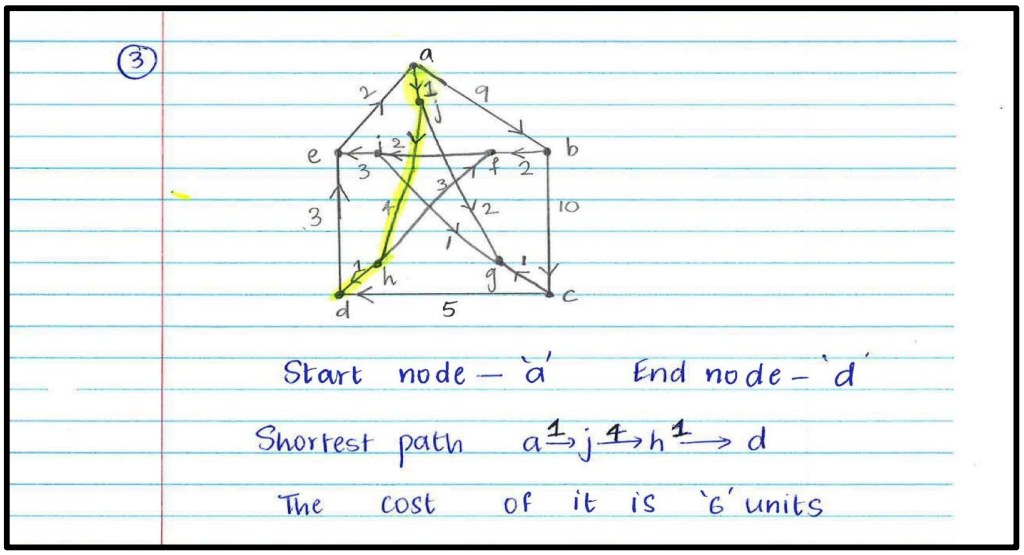


Result 2 from the program

```
1 C:\Users\Adolf\AppData\Local\Programs\Python\Python37-32\
  python.exe "C:/Users/Adolf/Desktop/Maths Project/Maths
  Project.py"
2 [{'path': ['a', 'd', 'b', 'c'], 'weight': 4}, {'path': ['a
  ', 'd', 'c'], 'weight': 10}, {'path': ['a', 'b', 'c'], '
  weight': 10}]
```

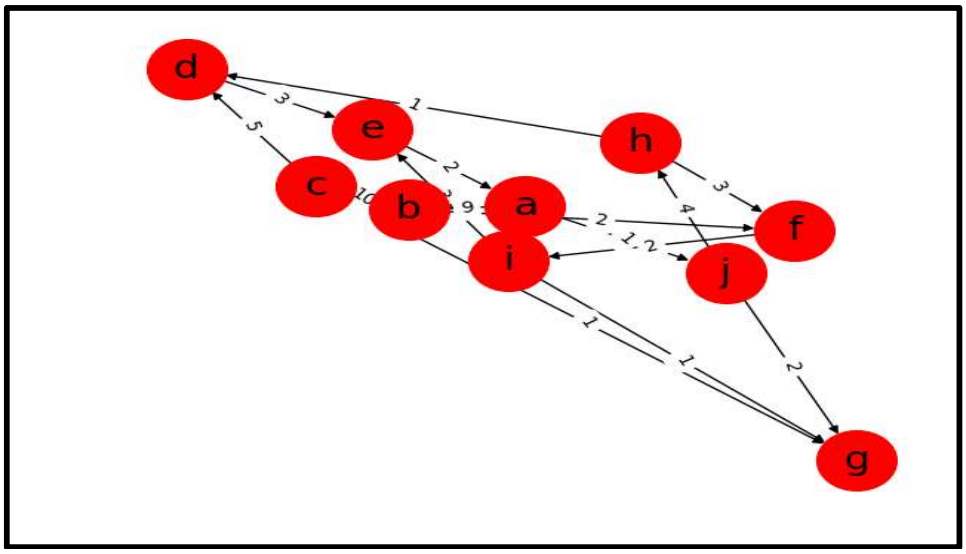
PRACTICAL EXAMPLE 3

THEORETICALLY EXPLAINED



Problem 3 solved using code

Graph 3 plotted by the program

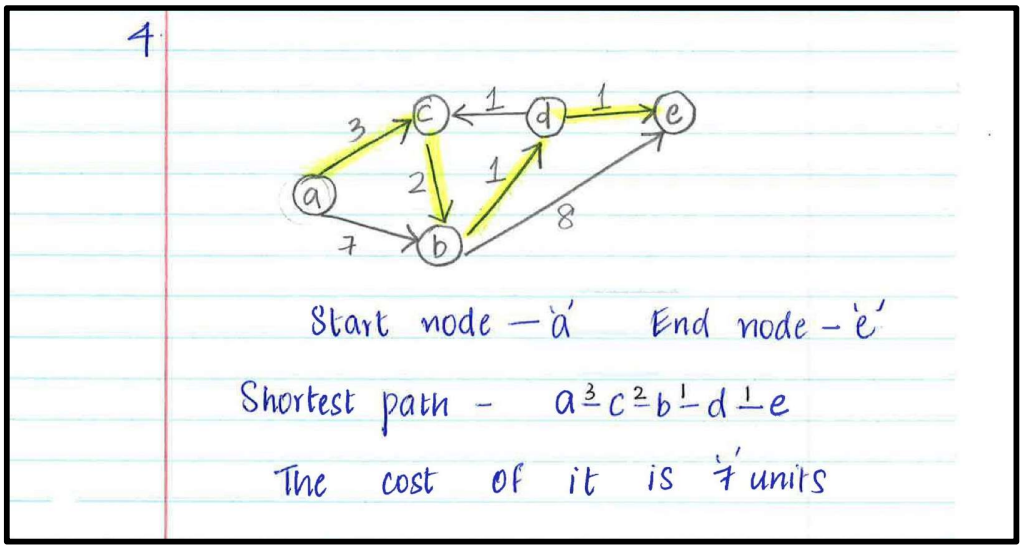


Result 3 from the program

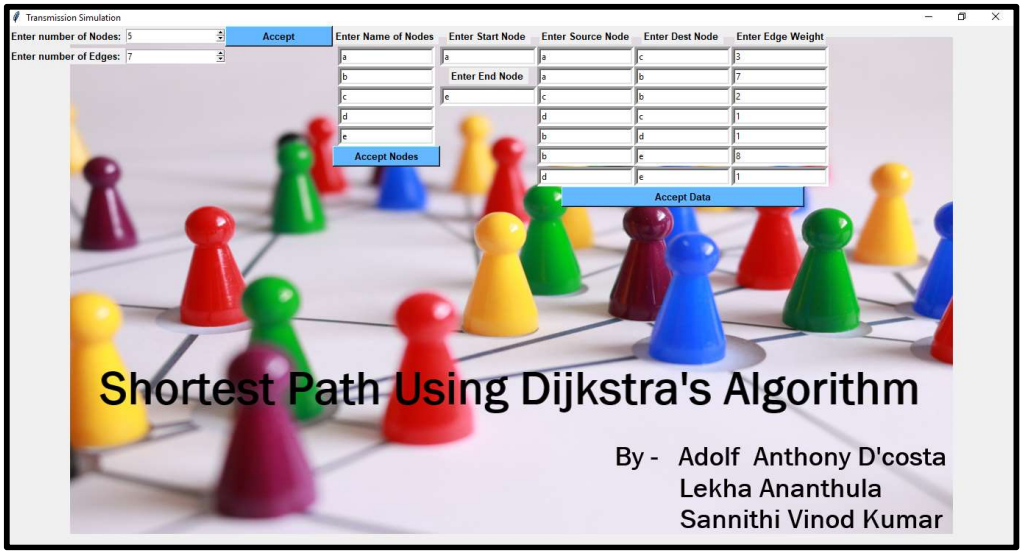
```
C:\Users\Adolf\AppData\Local\Programs\Python\Python37-32\
python.exe "C:/Users/Adolf/Desktop/Maths Project/Maths
Project.py"
[{'path': ['a', 'b', 'c', 'd'], 'weight': 24}, {'path': ['
a', 'j', 'h', 'd'], 'weight': 6}]
```

PRACTICAL EXAMPLE 4

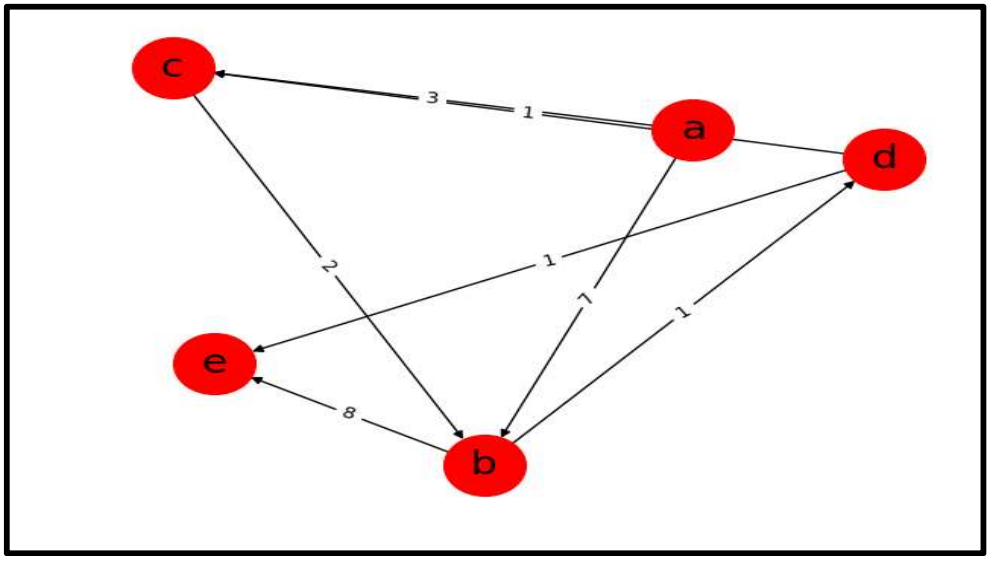
THEORETICALLY EXPLAINED



Problem 4 solved using code



Graph 4 plotted by the program

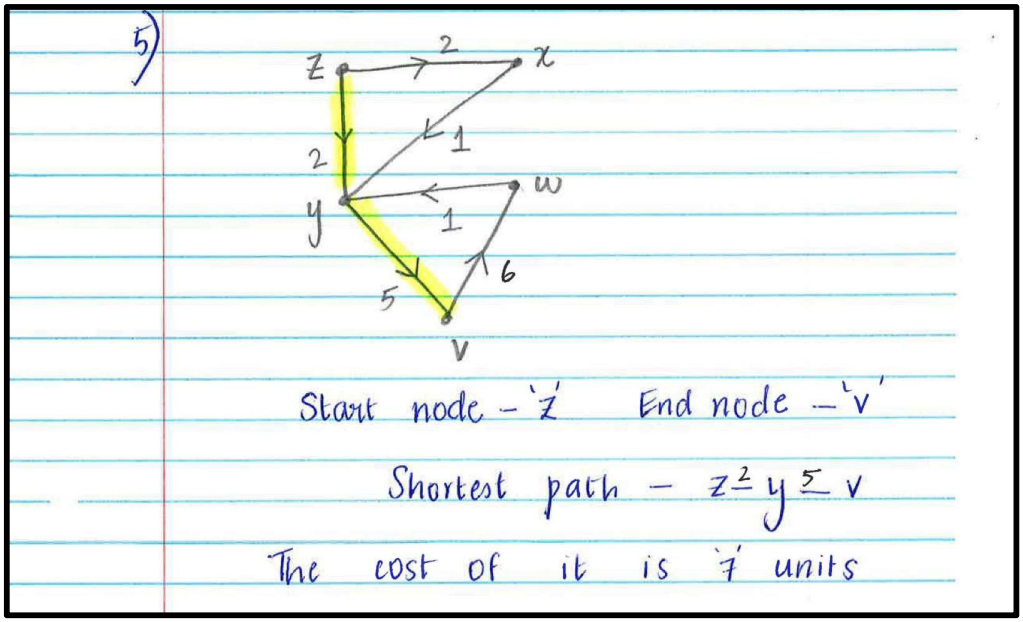


Result 4 from the program

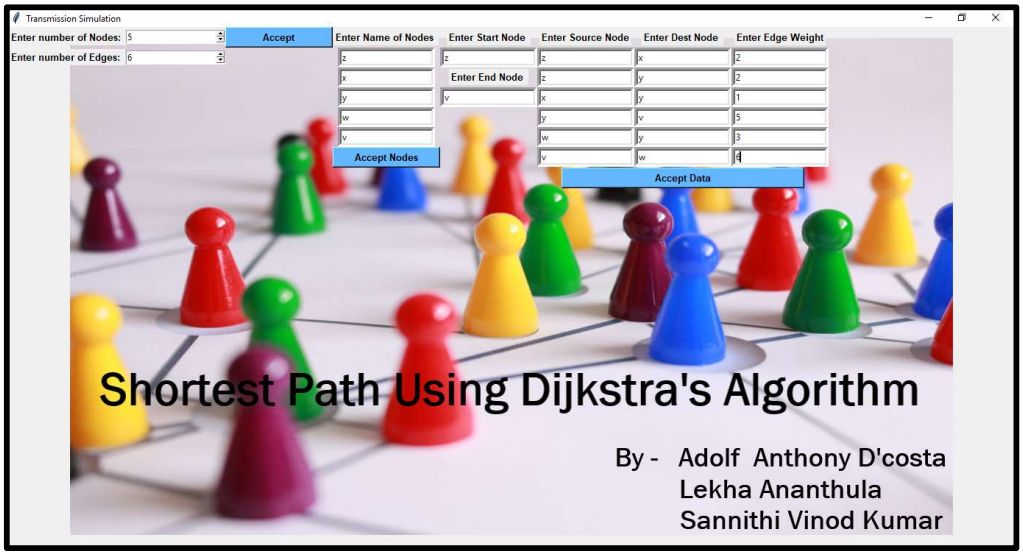
```
C:\Users\Adolf\AppData\Local\Programs\Python\Python37-32\
python.exe "C:/Users/Adolf/Desktop/Maths Project/Maths
Project.py"
[{'path': ['a', 'c', 'b', 'd', 'e'], 'weight': 7}, {'path
': ['a', 'c', 'b', 'e'], 'weight': 13}, {'path': ['a', 'b
', 'd', 'e'], 'weight': 9}, {'path': ['a', 'b', 'e'], '
weight': 15}]
```

PRACTICAL EXAMPLE 5

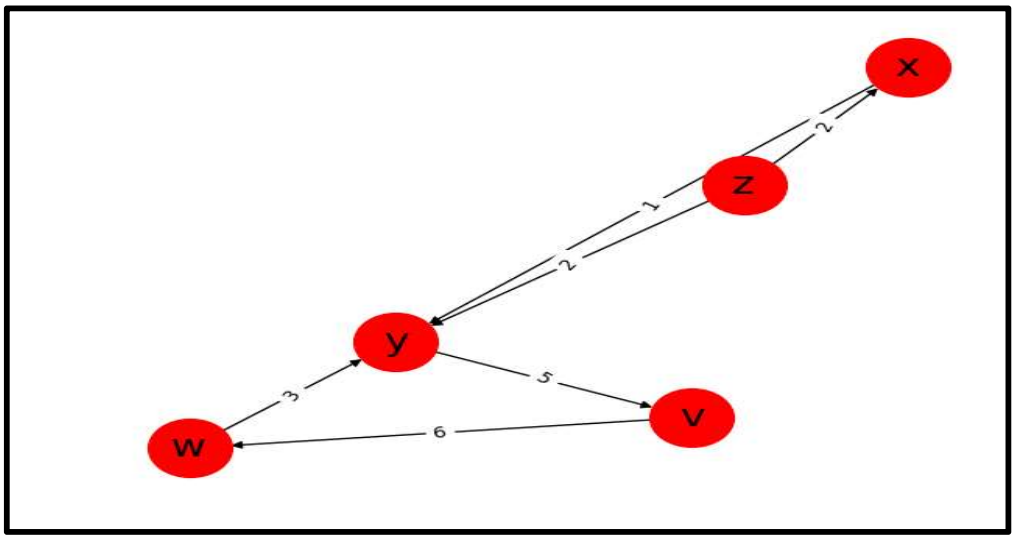
THEORETICALLY EXPLAINED



Problem 5 solved using code



Graph 5 plotted by the program



Result 5 from the program

```
C:\Users\Adolf\AppData\Local\Programs\Python\Python37-32\
python.exe "C:/Users/Adolf/Desktop/Maths Project/Maths
Project.py"
[{'path': ['z', 'x', 'y', 'v'], 'weight': 8}, {'path': ['z
', 'y', 'v'], 'weight': 7}]
```