Diagram

Description automatically generated

DFS For Graph – 1

Lets start with A

Step – 1

Visitied = A,

DFS List = ()

Step – 2

Visited = A, B

DFSList = [(A, B, 25)]

Step – 3

Visited = A, B, E

DFSList = [(A, B, 25), (B, E, 60)]

Step – 4

Visited = A, B, E, G

DFSList = [(A, B, 25), (B, E, 60), (E, G, 45)]

Step – 5

Visited = A, B, E, G, F

DFSList = [(A, B, 25), (B, E, 60), (E, G, 45), (G, F, 39)]

Step – 6

Visited = A, B, E, G, F, D

DFSList = [(A, B, 25), (B, E, 60), (E, G, 45), (G, F, 39), (F, D, 65)]

Step – 7

Visited = A, B, E, G, F, D, C

DFSList = [(A, B, 25), (B, E, 60), (E, G, 45), (G, F, 39), (F, D, 65), (D, C, 15)]

DFS for Graph – 2

Lets start with A

Step -1

Visited = A

DFSList = []

Step -2

Visited = A, B

DFSList = [(A, B, 35)]

Step -3

Visited = A, B, E

DFSList = [(A, B, 35), (B, E, 35)]

Step -4

Visited = A, B, E, G

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35)]

Step -5

Visited = A, B, E, G, J

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55)]

Step -6

Visited = A, B, E, G, J, I

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55), (J, I, 51)]

Step -6

Visited = A, B, E, G, J, I, F

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55), (J, I, 51), (I, F, 45)]

Step -7

Visited = A, B, E, G, J, I, F, C

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55), (J, I, 51), (I, F, 45), (F, C, 30)]

Step – 8

Visited = A, B, E, G, J, I, F, C, D

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55), (J, I, 51), (I, F, 45), (F, C, 30), (F, D, 35)]

Step – 9

Visited = A, B, E, G, J, I, F, C, D, H

DFSList = [(A, B, 35), (B, E, 35), (E, G, 35), (G, J, 55), (J, I, 51), (I, F, 45), (F, C, 30), (F, D, 35), (D, H, 45)]

BFS For Graph – 1

Step -1

Visited = A

BFSList = []

Step – 2

Visited = A. B, E, D, C

BFSList = [(A, B, 25), (A, E, 75), (A, D, 25), (A, C, 25)]

Step – 2

Visited = A. B, E, D, C, G, F

BFSList = [(A, B, 25), (A, E, 75), (A, D, 25), (A, C, 25), (E, G, 45), (E, F, 39)]

BFS for Graph – 2

Step -1

Visited = A

BFSList = []

Step – 2

Visited = A, B, D, C, E, H, F

BFSList = [(A, B, 35), (A, D, 40), (A, C, 30), (B, E, 35), (D, H, 45), (D, F, 35)]

Step – 3

Visited = A, B, D, C, E, H, F, G, I, J

BFSList = [(A, B, 35), (A, D, 40), (A, C, 30), (B, E, 35), (D, H, 45), (D, F, 35), (E, G, 35), (H, J, 50), (H, I, 12)]