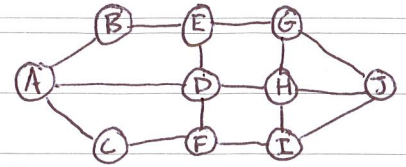


Breadth First Search

1. Q = [A]
   New = {B,C,D,E,F,G,H,I,J}
   Old = {A}
   L[A] = {B,C,D}
   T = {}

2. Q = [BCD]
   New = {E,F,G,H,I,J}
   Old = {A,B,C,D}
   L[B] = {A,E}
   T = {(A,B),(A,C),(A,D)}

3. Q = [CDE]
   New = {F,G,H,I,J}
   Old = {A,B,C,D,E}
   L[C] = {A,F}
   T = {(A,B),(A,C),(A,D),(B,E)}

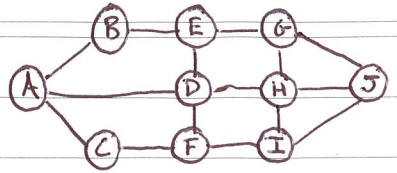
4. Q = [DEF]
   New = {G,H,I,J}
   Old = {A,B,C,D,E,F}
   L[D] = {A,E,F,H}
   T = {(A,B),(A,C),(A,D),(B,E),(C,F)}

5. Q = [EFH]
   New = {G,I,J}
   Old = {A,B,C,D,E,F,H}
   L[E] = {B,D,G}
   T = {(A,B),(A,C),(A,D),(B,E),(C,F),(D,H)}

6. Q = [FHG]
   New = {I,J}
   Old = {A,B,C,D,E,F,H,G}
   L[F] = {C,D,I}
   T = {(A,B),(A,C),(A,D),(B,E),(C,F),(D,H),(E,G)}

7. Q = [HGI]
   New = {J}
   Old = {A,B,C,D,E,F,H,G,I}
   L[H] = {D,G,I,J}
   T = {(A,B),(A,C),(A,D),(B,E),(C,F),(D,H),(E,G),(F,I)}

8. Q = [] ← No unvisited dequeue at
   New = {}
   OLD = {A,B,C,D,E,F,H,G,I,J}
   T = {(A,B),(A,C),(A,D),(B,E),(C,F),(D,H),(E,G),(F,I),(H,J)}



Depth First Search

1. S = [A]
   new = {B,C,D,E,F,G,H,I,J}
   old = {A}
   L[A] = {B,C,D}
   T = {}

2. S = [AB]
   new = {C,D,E,F,G,H,I,J}
   old = {A,B}
   L[B] = {A,E}
   T = {(A,B)}

3. S = [ABE]
   new = {C,D,F,G,H,I,J}
   old = {A,B,E}
   L[E] = {B,D,G}
   T = {(A,B),(B,E)}

4. S = [ABED]
   new = {C,F,G,H,I,J}
   old = {A,B,E,D}
   L[D] = {E,F,H}
   T = {(A,B),(B,E),(E,D)}

5. S = [ABEDF]
   new = {C,G,H,I,J}
   old = {A,B,E,D,F}
   L[F] = {C,D,I}
   T = {(A,B),(B,E),(E,D),(D,F)}

6. S = [ABEDFC]
   new = {G,H,I,J}
   old = {A,B,E,D,F,C}
   L[C] = {A,F}
   T = {(A,B),(B,E),(E,D),(D,F),(F,C)}

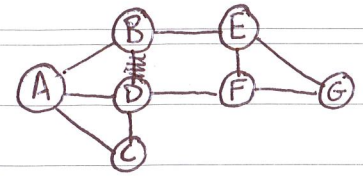
7. S = [ABEDF]
   new = {G,H,I,J}
   old = {A,B,E,D,F,C}
   L[F] = {C,D,I}
   T = {(A,B),(B,E),(E,D),(D,F),(F,C)}

8. S = [ABEDFI]
   new = {G,H,J}
   old = {A,B,E,D,F,C,I}
   L[I] = {F,H,J}
   T = {(A,B),(B,E),(E,D),(D,F),(F,C),(F,I)}

9. S = [ABEDFIH]
   new = {G,J}
   old = {A,B,E,D,F,C,I,H}
   L[H] = {D,G,I,J}
   T = {(A,B),(B,E),(E,D),(D,F),(F,C),(F,I),(I,H),(H,G)}

10. S = [ABEDFIHG]
    new = {J}
    old = {A,B,E,D,F,C,I,H,G}
    L[G] = {E,H,J}
    T = {(A,B),(B,E),(E,D),(D,F),(F,C),(F,I),(I,H),(H,G),(G,J)}

11. S = []
    new = {}
    old = {A,B,E,D,F,C,I,H,G,J}
    T = {(A,B),(B,E),(E,D),(D,F),(F,C),(F,I),(I,H),(H,G),(G,J)}



Breadth First Search

Q = [ ]

New = {A, B, C, D, E, F, G}

Old = { }

T = { }

1. Q = [A]

L[A] = {B, C, D}

New = {B, C, D, E, F, G}

Old = {A}

T = { }

2. Q = [B C D] (no new adjacent nodes so skip)

L[B] = ~~{A, E}~~ {A, E}

New = {E, F, G}

OLD = {A, B, C, D}

T = {(A,B), (A,C), (A,D)}

3. Q = [D E]

L[D] = ~~{A, C, F}~~ {A, C, F}

New = {F, G}

Old = {A, B, C, D, E}

T = {(A,B), (A,C), (A,D), (B,E)}

4. Q = [E F]

L[E] = {B, F, G}

New = {G}

Old = {A, B, C, D, E, F}

T = {(A,B), (A,C), (A,D), (B,E), (D,F)}

5. Q = [F G]

L[F] = {D, E, G}

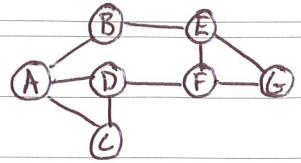
New = { }

Old = {A, B, C, D, E, F, G}

T = {(A,B), (A,C), (A,D), (B,E), (D,F), (E,G)}

No new nodes so done

A → B → A → C → A → D → B → E → D → F → E → G



Depth First Search

S = [ ]

New = {A, B, C, D, E, F, G}

Old = { }

T = { }

1. S = [A]

L[A] = {B, C, D}

New = {B, C, D, E, F, G}

Old = {A}

T = { }

2. S = [A B]

L[B] = {A, E}

New = {C, D, E, F, G}

Old = {A, B}

T = {(A,B)}

3. S = [A B E]

L[E] = {F, G}

New = {C, D, F, G}

Old = {A, B, E}

T = {(A,B), (B,E)}

4. S = [A B E F]

L[F] = {D, E, G}

New = {C, D, G}

Old = {A, B, E, F}

T = {(A,B), (B,E), (E,F)}

5. S = [A B E F D]

L[D] = {A, C, F}

New = {C, G}

Old = {A, B, E, F, D}

T = {(A,B), (B,E), (E,F), (F,D)}

No more unvisited so pop off stack

6. S = [A B E F D C]

L[C] = {A, D}

New = {G}

Old = {A, B, E, F, D, C}

T = {(A,B), (B,E), (E,F), (F,D), (D,C)}

7. S = [A B E F]

L[F] = {D, E, G}

New = {G}

Old = {A, B, E, F, D, C}

T = {(A,B), (B,E), (E,F), (F,D), (D,C)}

8. S = [A B E F G]

L[G] = {E, F}

New = { }

Old = {A, B, E, F, D, C, G}

T = {(A,B), (B,E), (E,F), (F,D), (D,C), (F,G)}