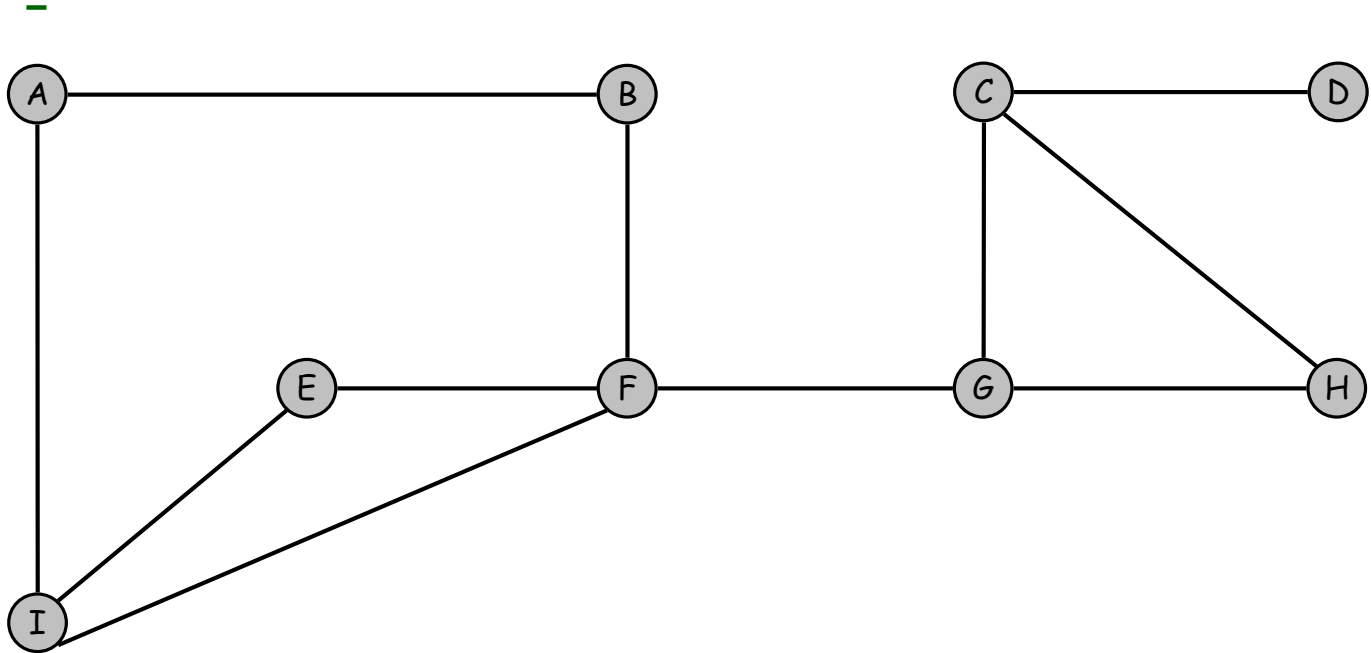


Breadth First Search

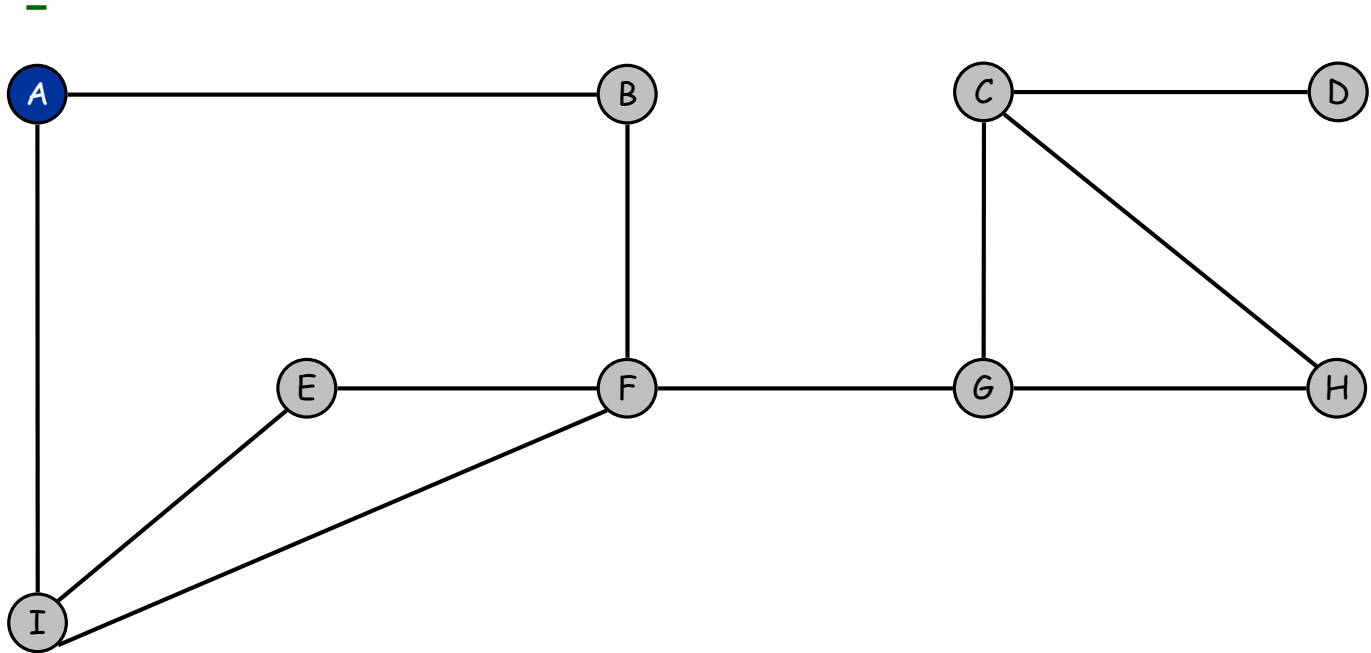


front



FIFO Queue

Breadth First Search



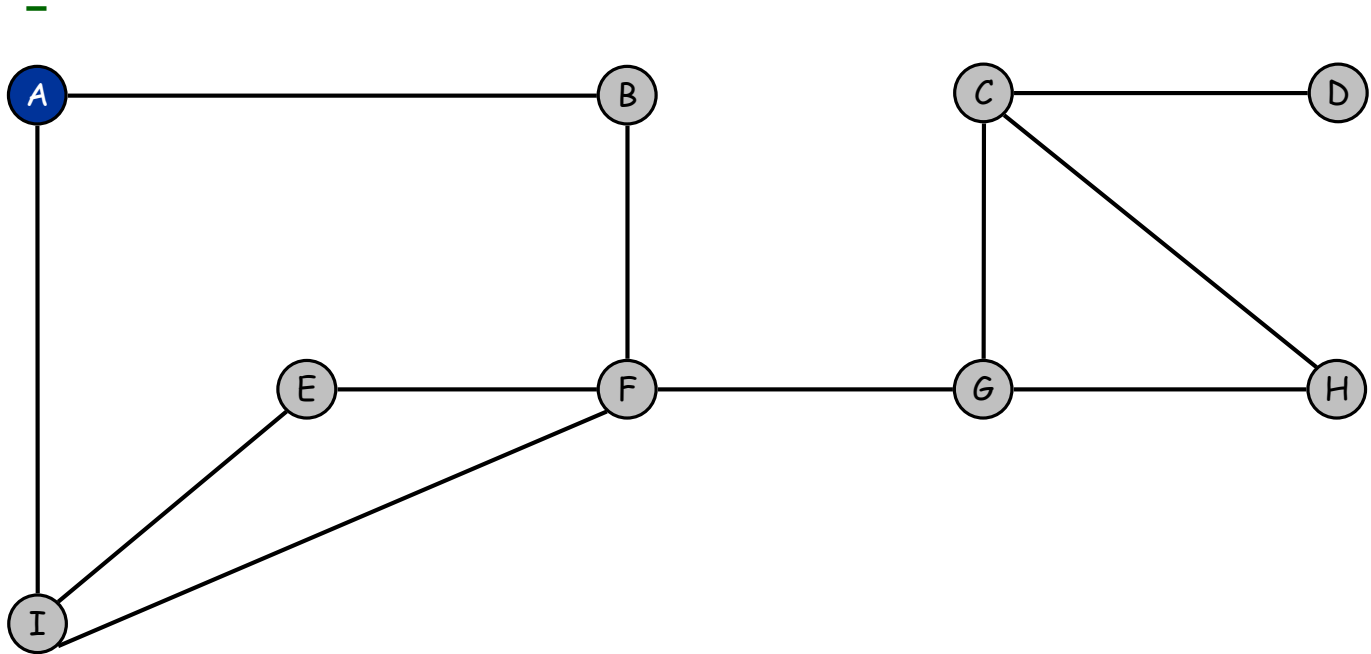
enqueue source node

front

A

FIFO Queue

Breadth First Search



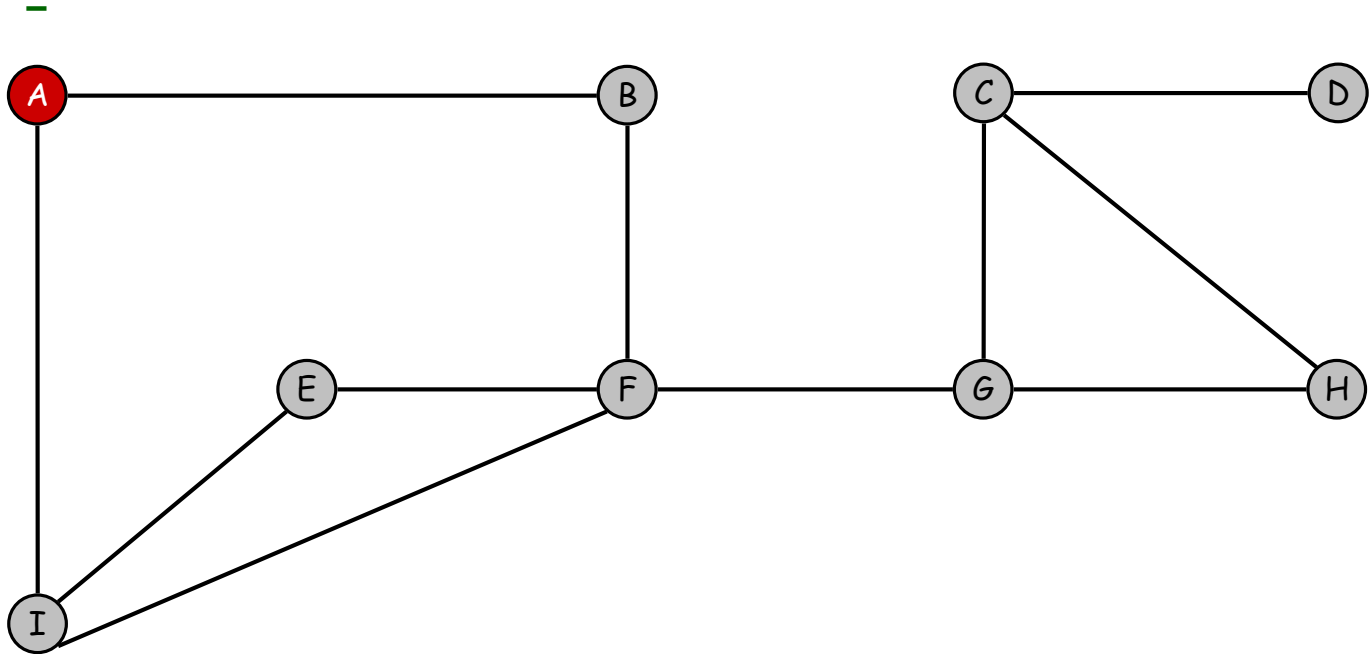
dequeue next vertex

front

A

FIFO Queue

Breadth First Search

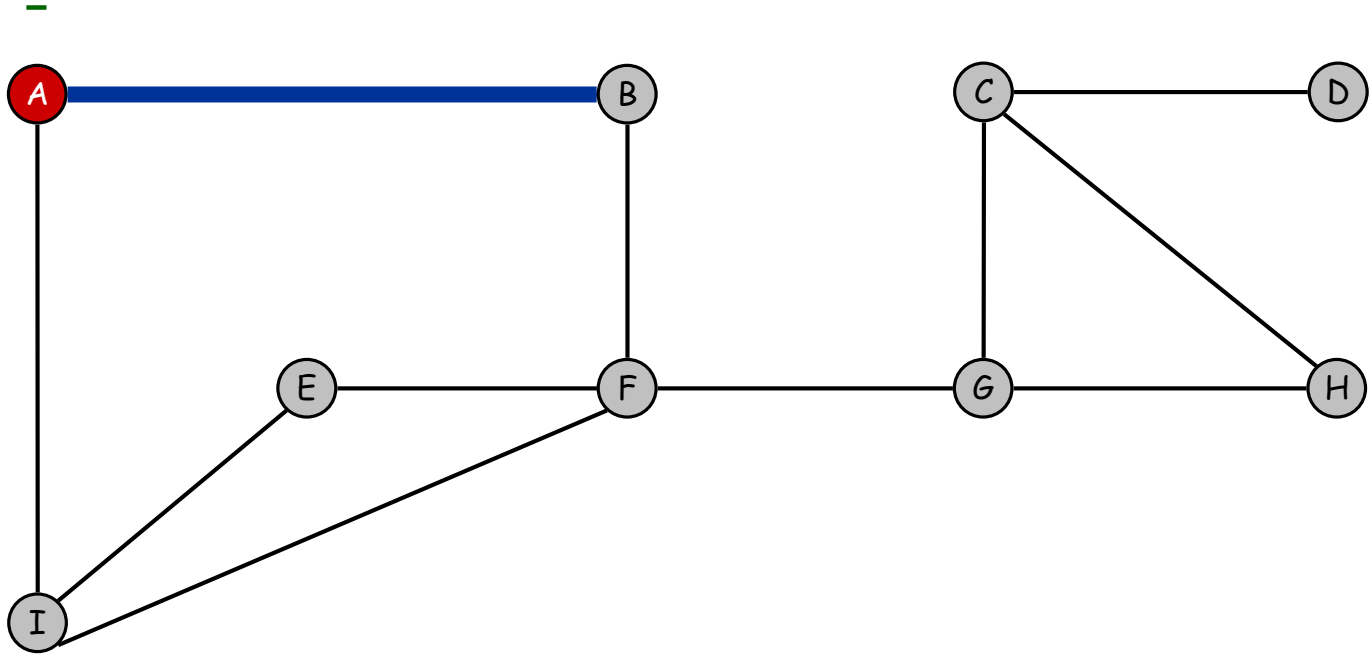


visit neighbors of A

front

FIFO Queue

Breadth First Search

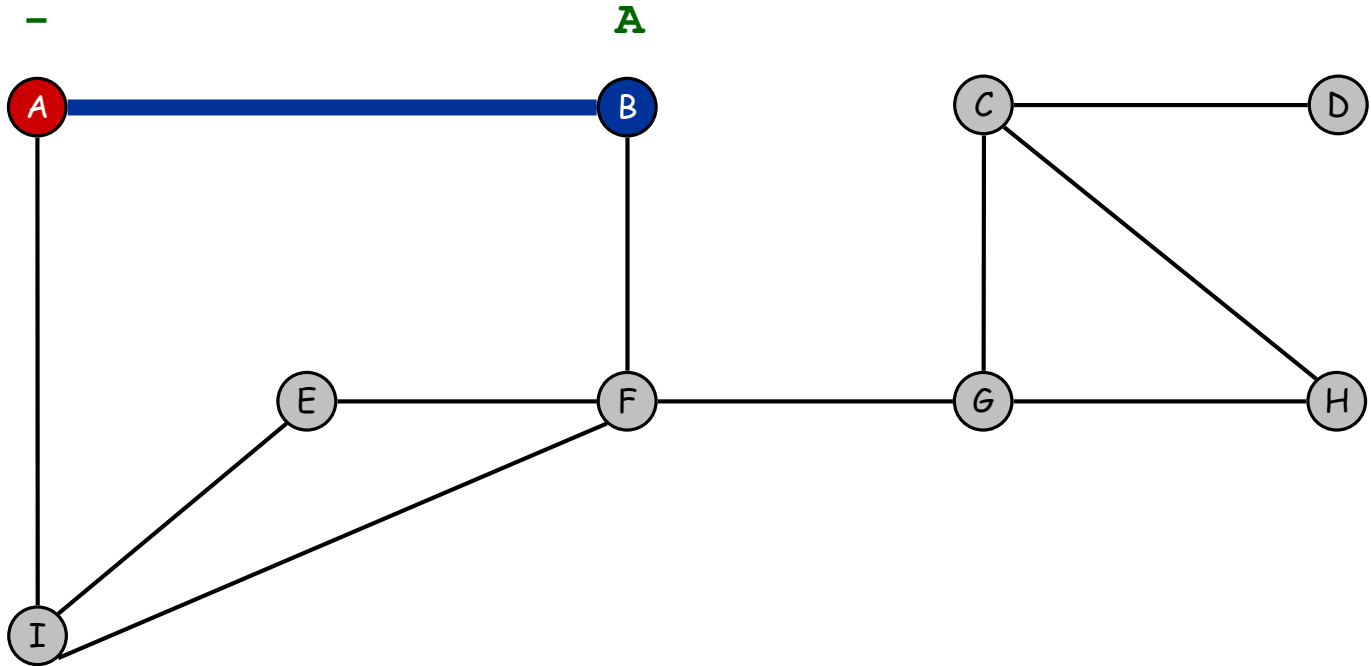


visit neighbors of A

front

FIFO Queue

Breadth First Search



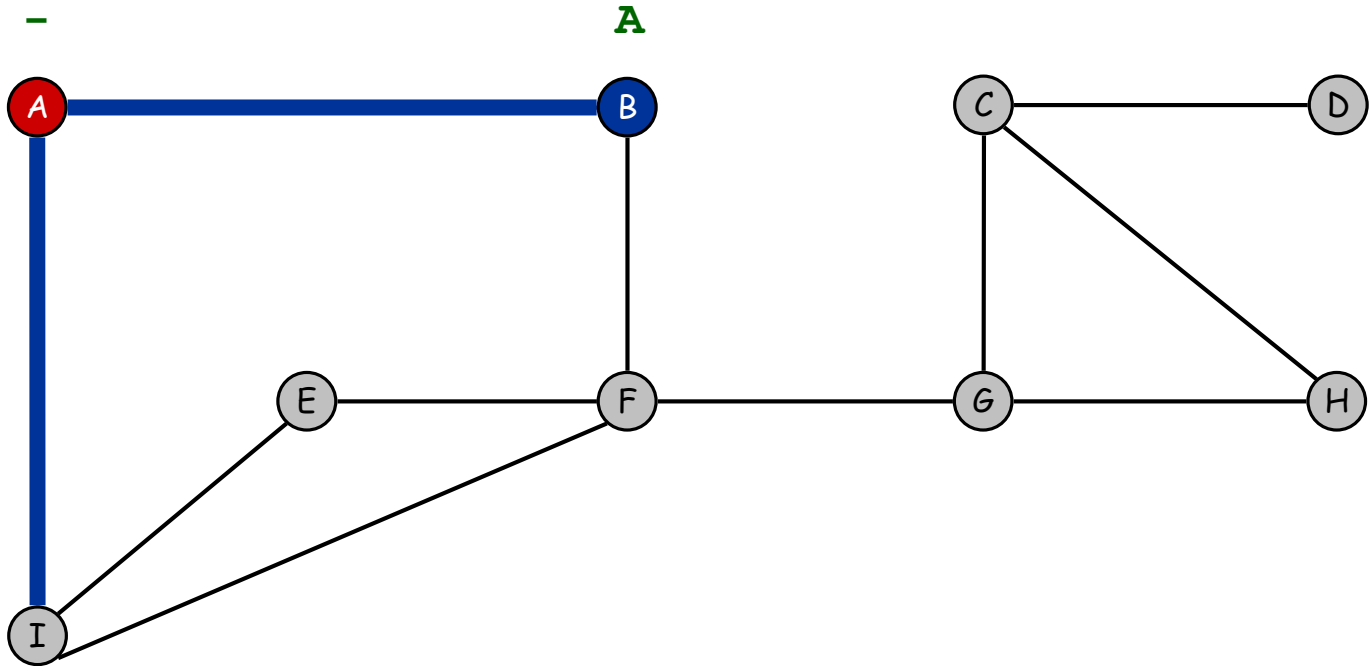
B discovered

front

B

FIFO Queue

Breadth First Search



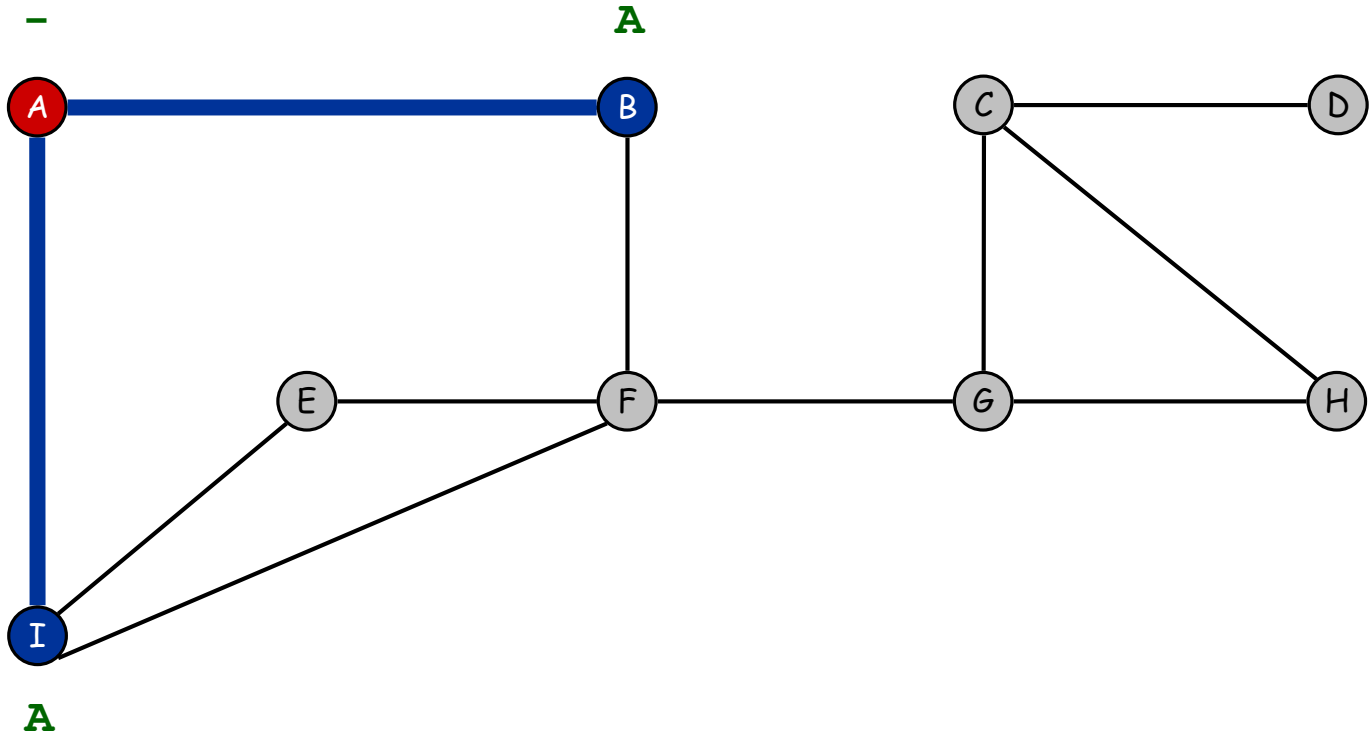
visit neighbors of A

front

B

FIFO Queue

Breadth First Search



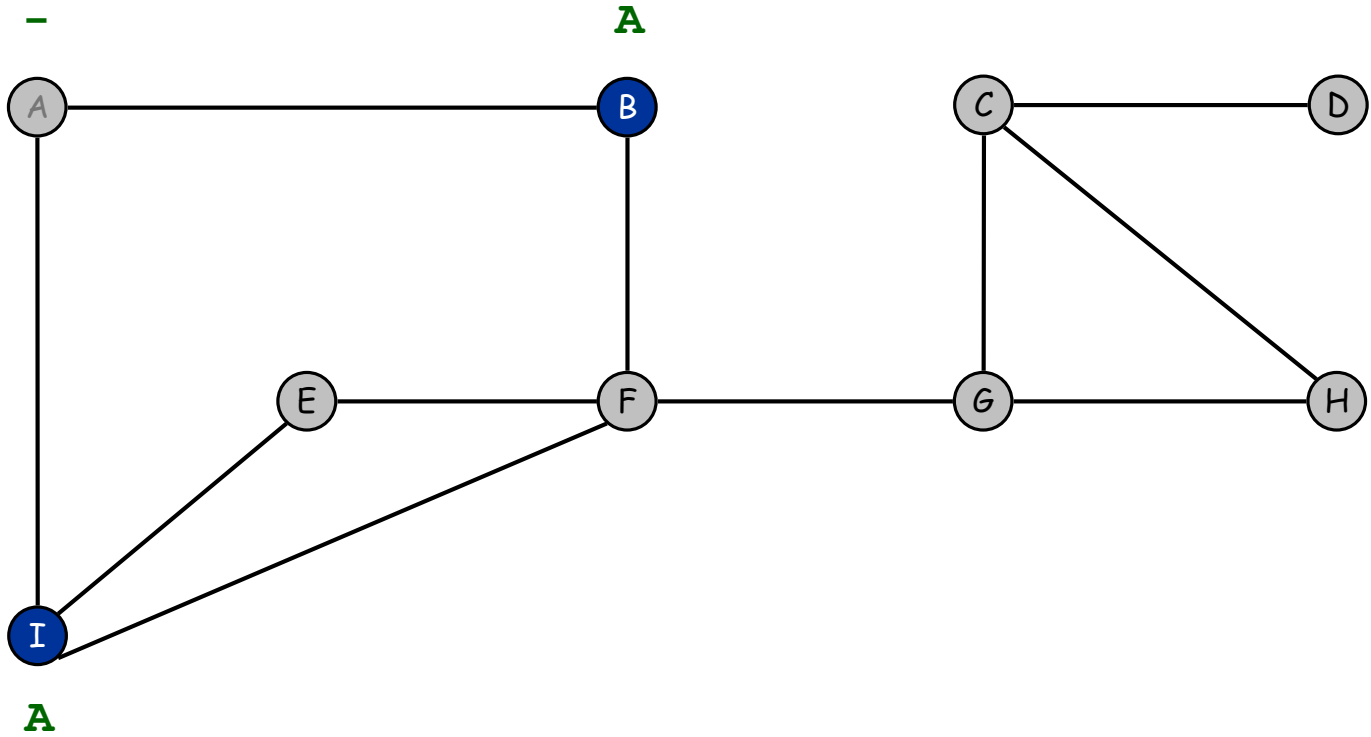
I discovered

front

B I

FIFO Queue

Breadth First Search



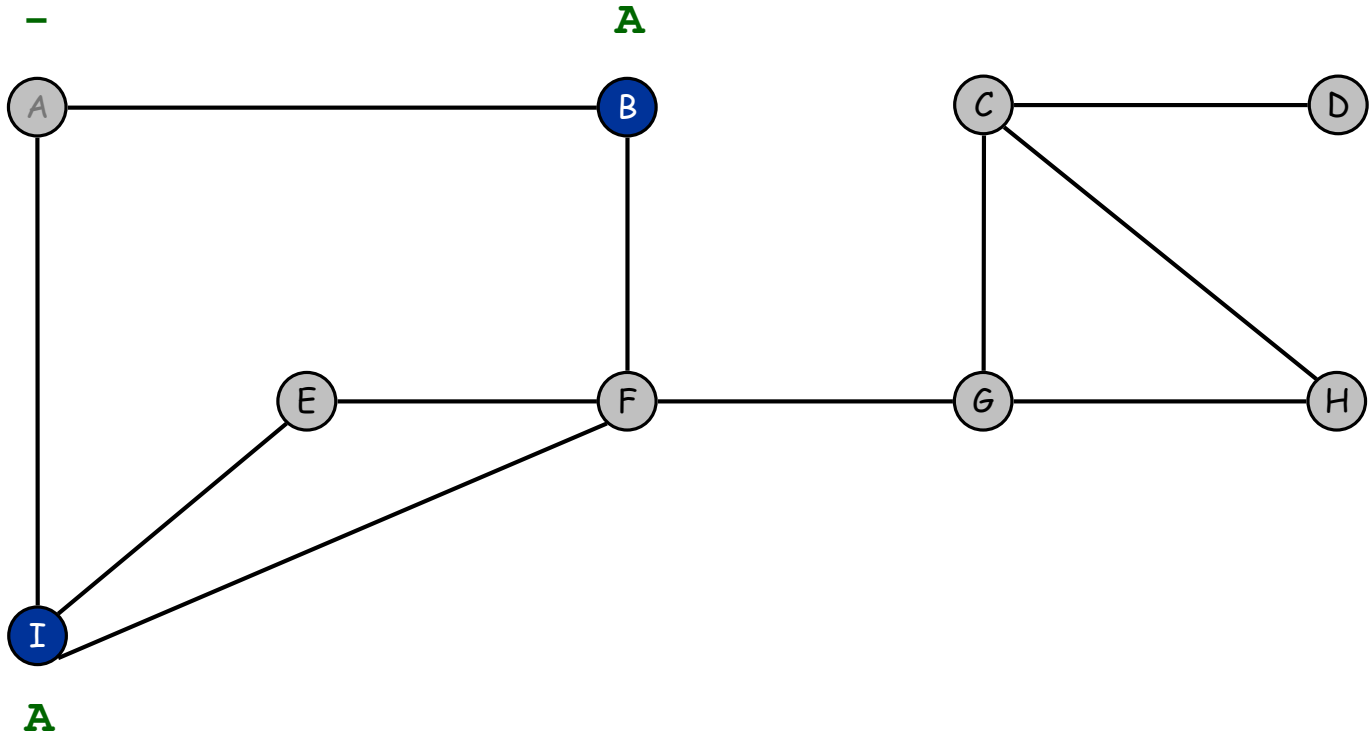
finished with A

front

B I

FIFO Queue

Breadth First Search



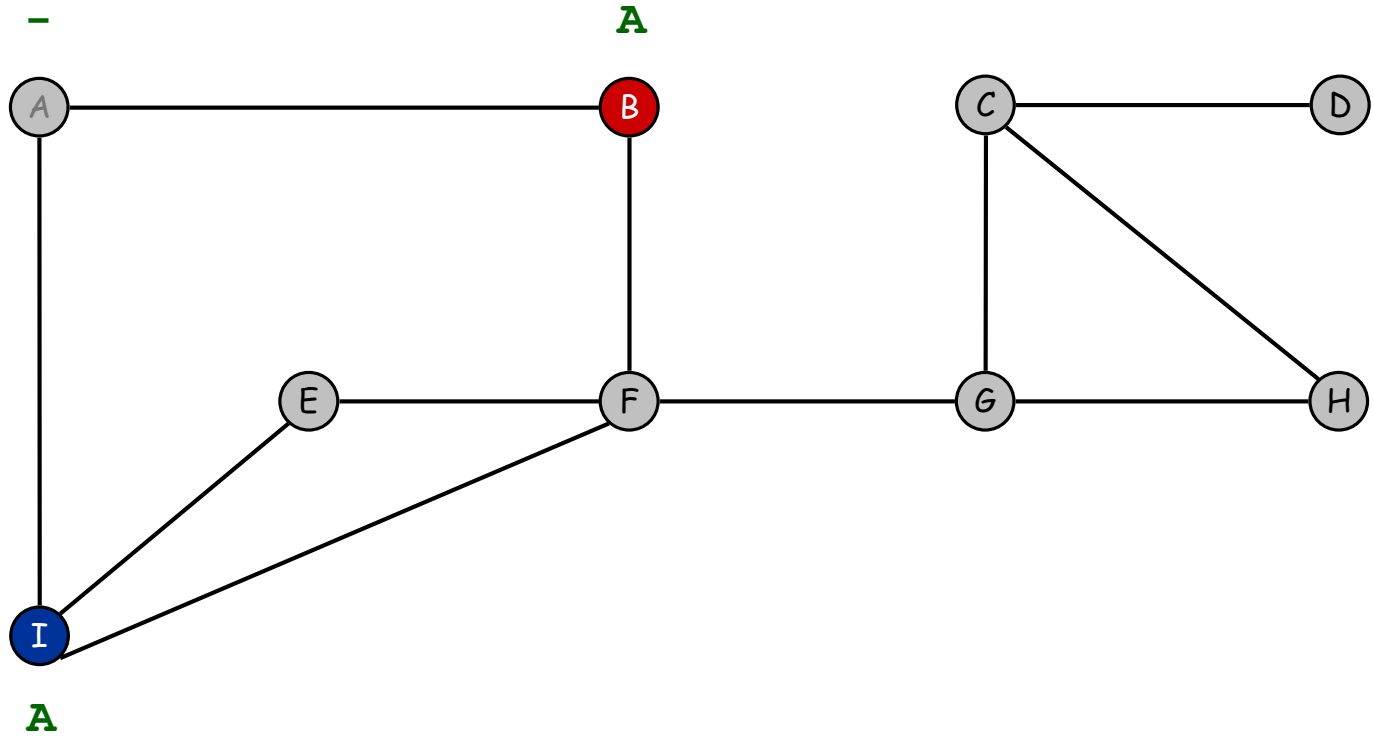
dequeue next vertex

front

B I

FIFO Queue

Breadth First Search



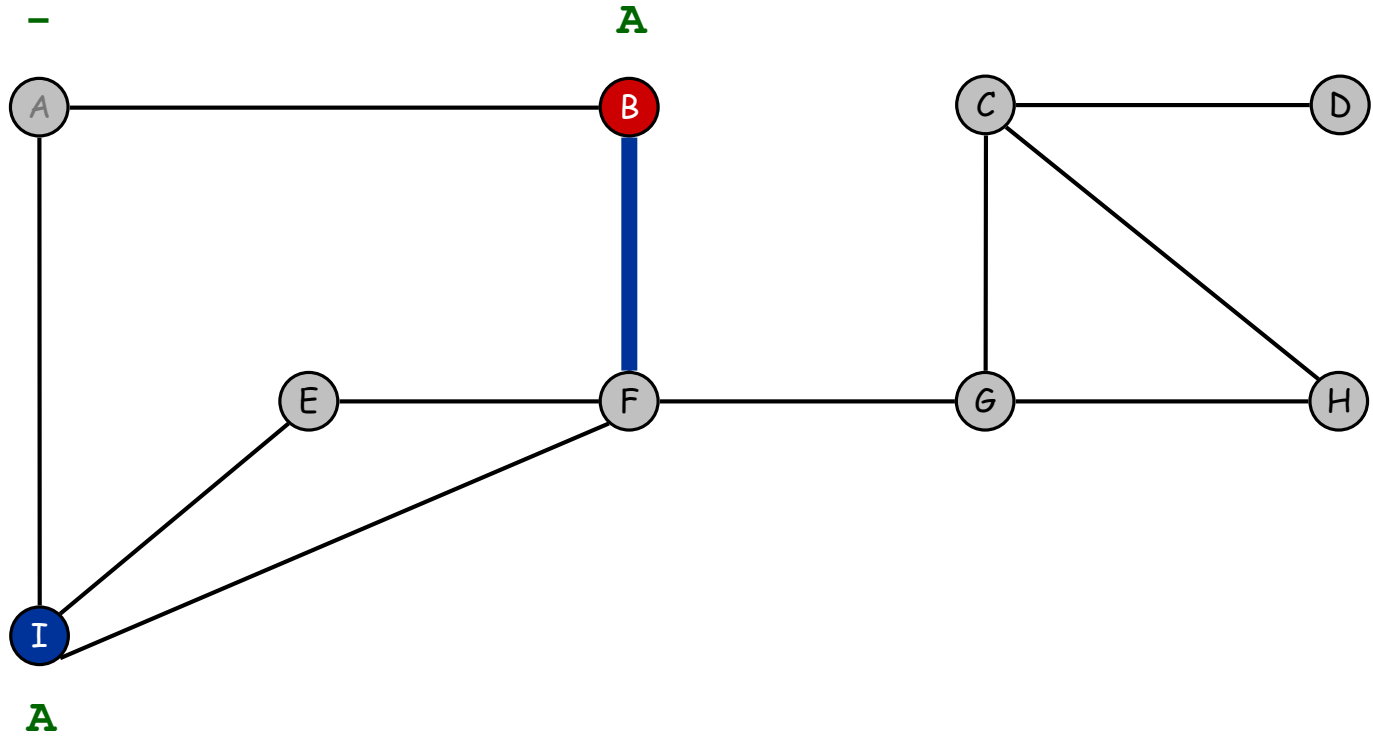
visit neighbors of B

front

I

FIFO Queue

Breadth First Search



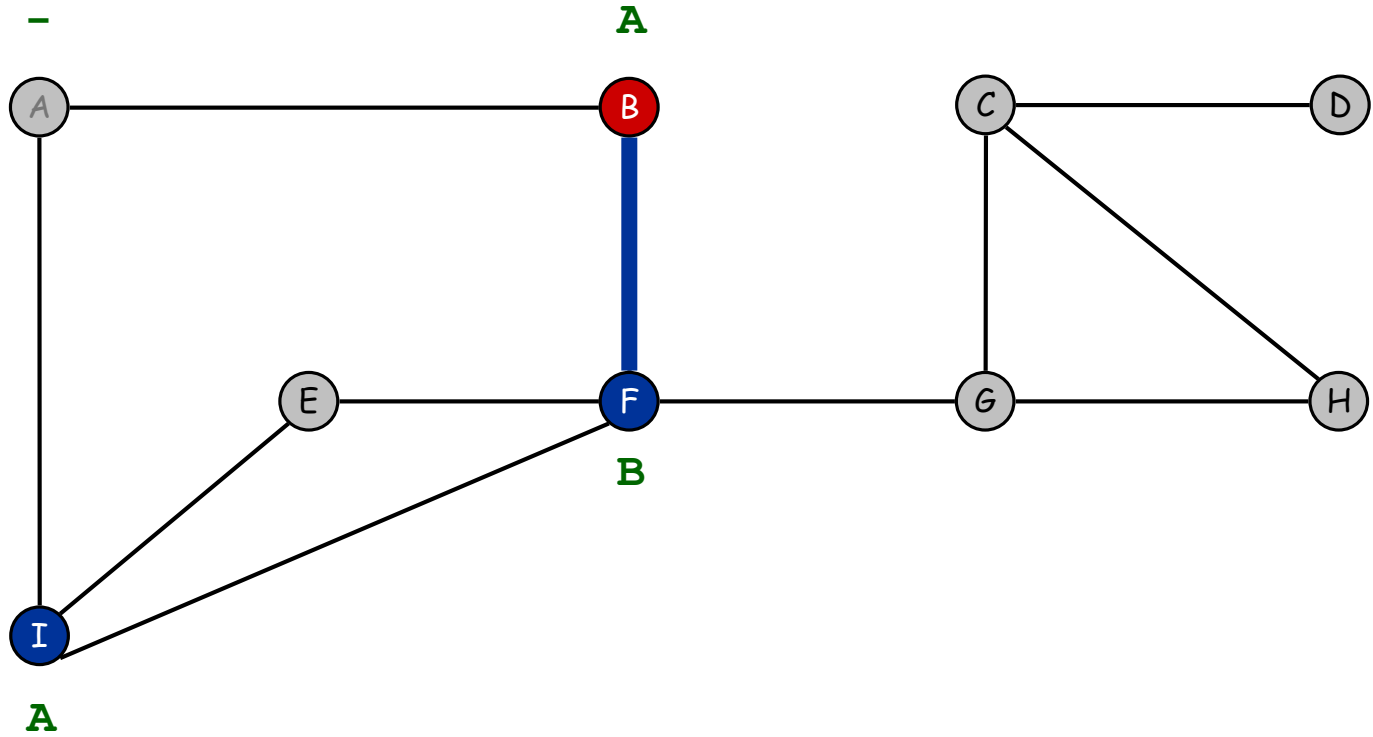
visit neighbors of B

front

I

FIFO Queue

Breadth First Search



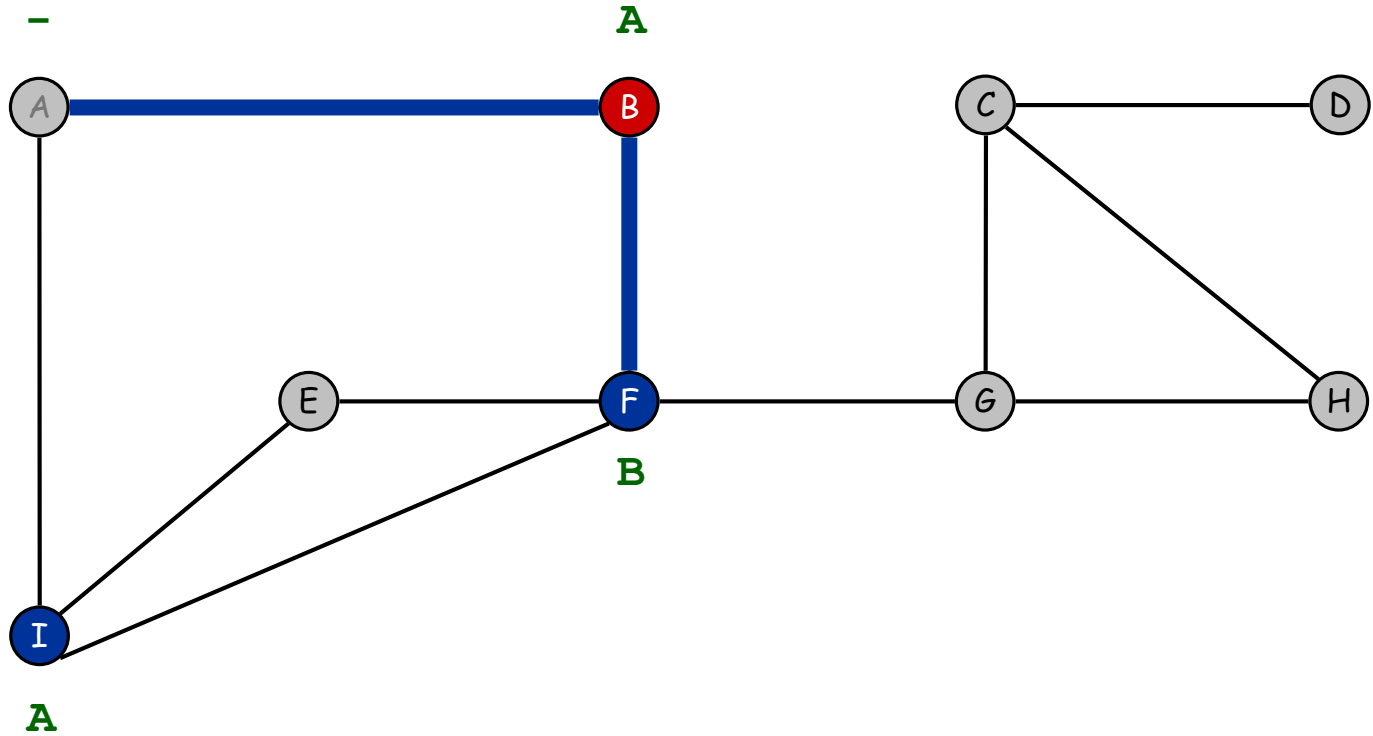
F discovered

front

I F

FIFO Queue

Breadth First Search



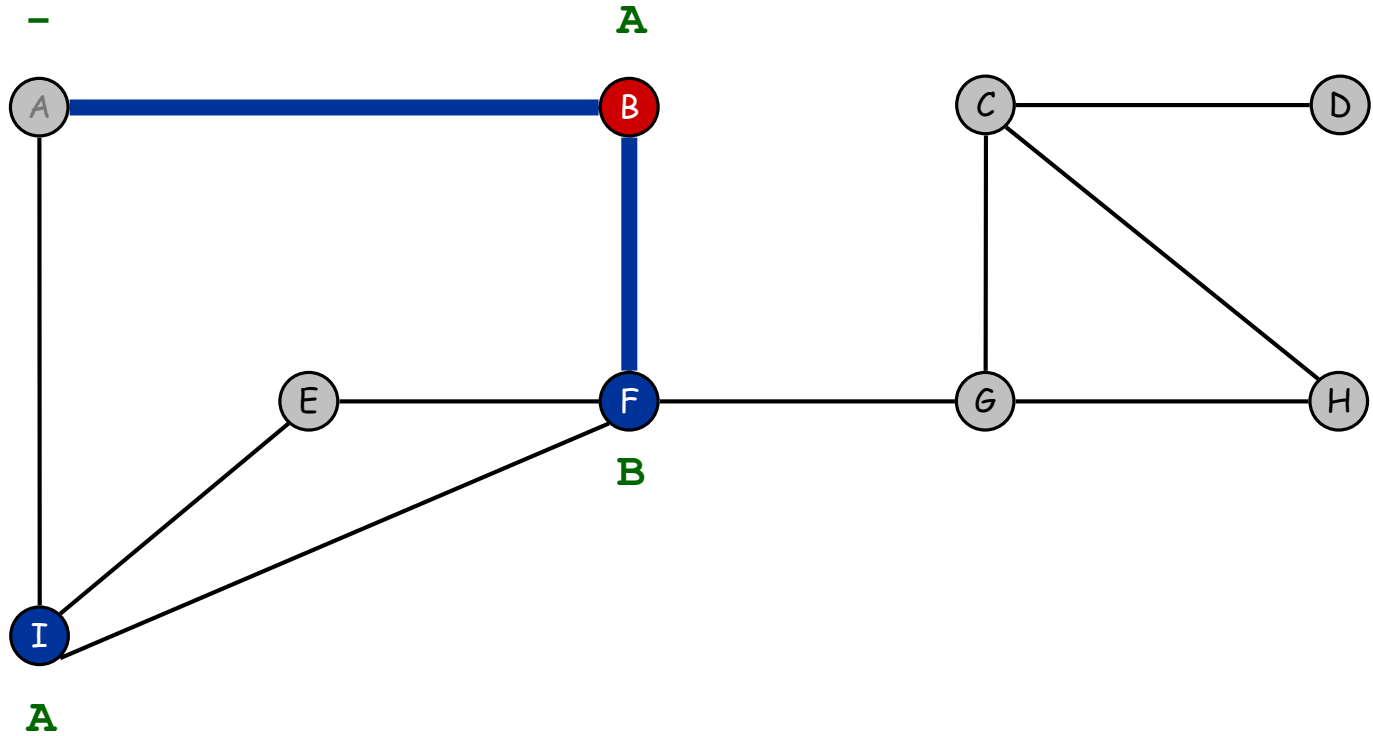
visit neighbors of B

front

I F

FIFO Queue

Breadth First Search



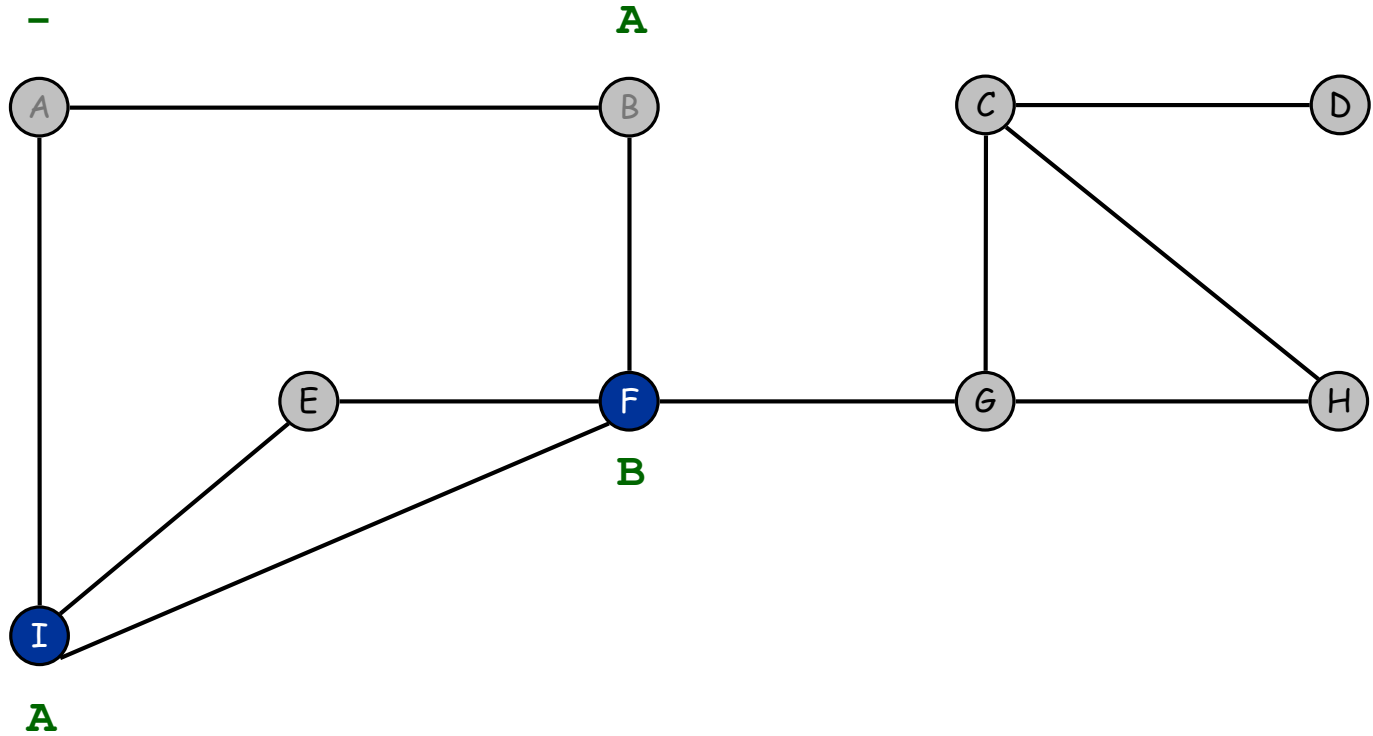
A already discovered

front

I F

FIFO Queue

Breadth First Search



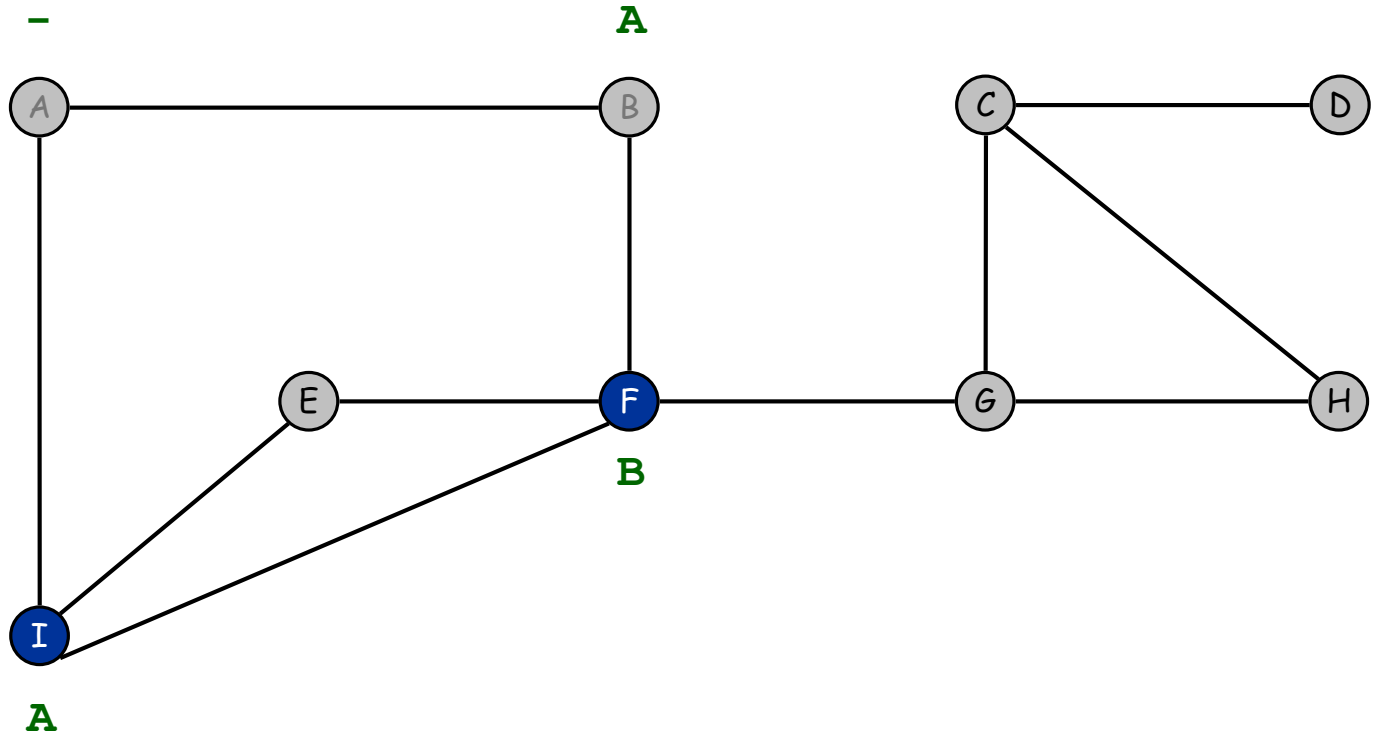
finished with B

front

I F

FIFO Queue

Breadth First Search



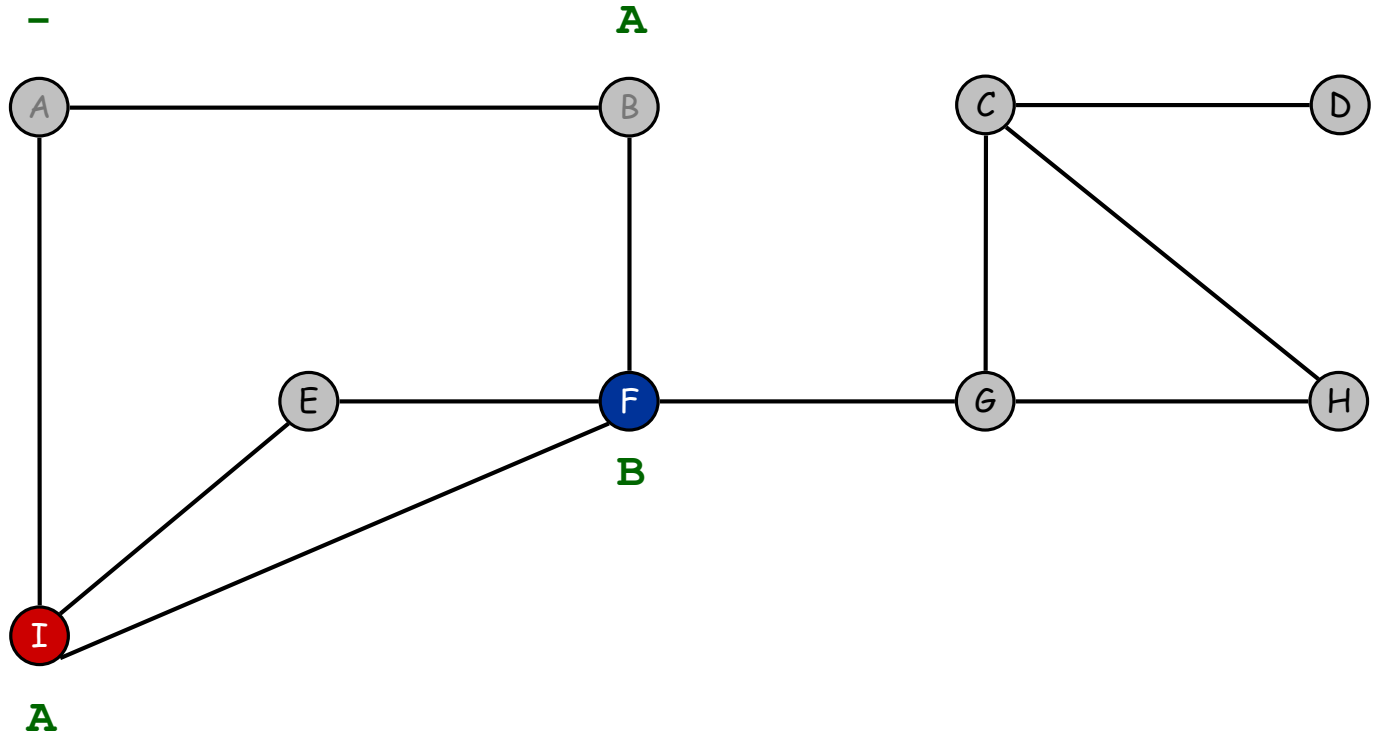
dequeue next vertex

front

I F

FIFO Queue

Breadth First Search



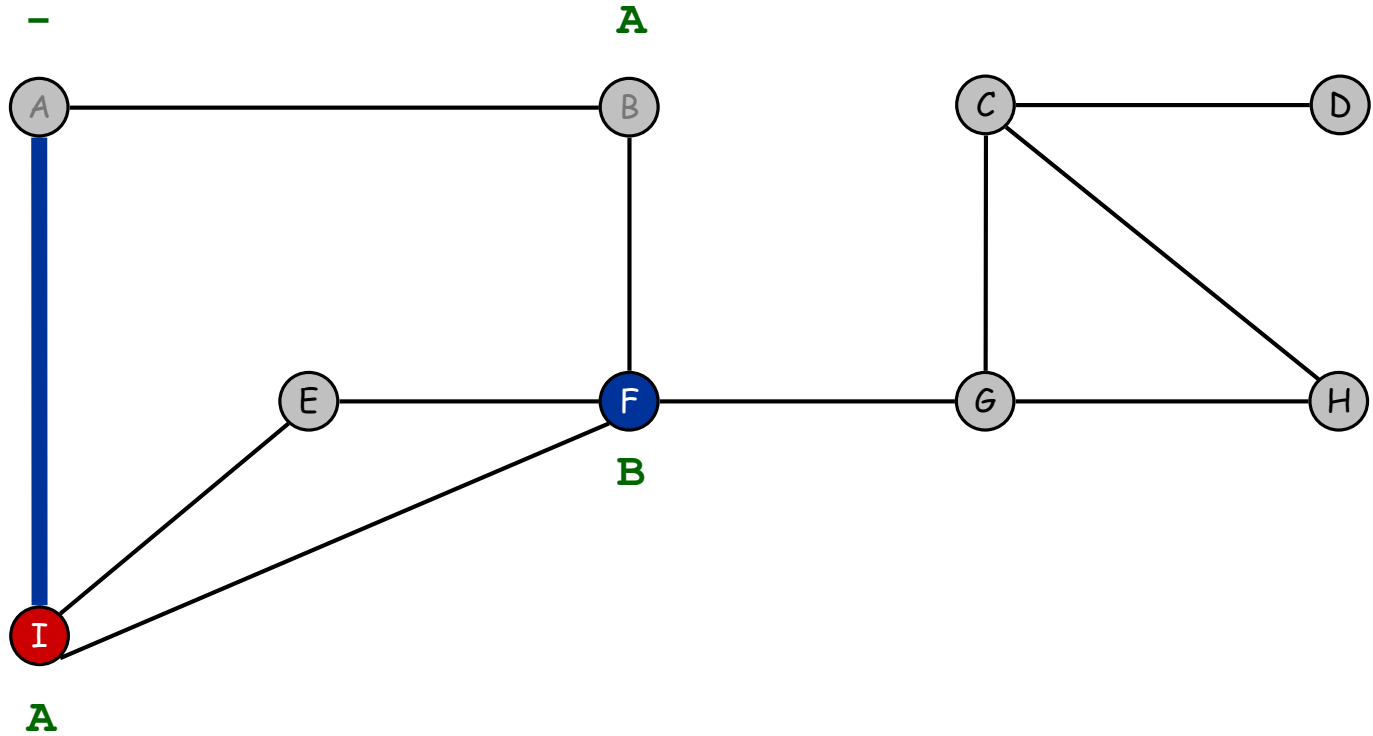
visit neighbors of I

front

F

FIFO Queue

Breadth First Search



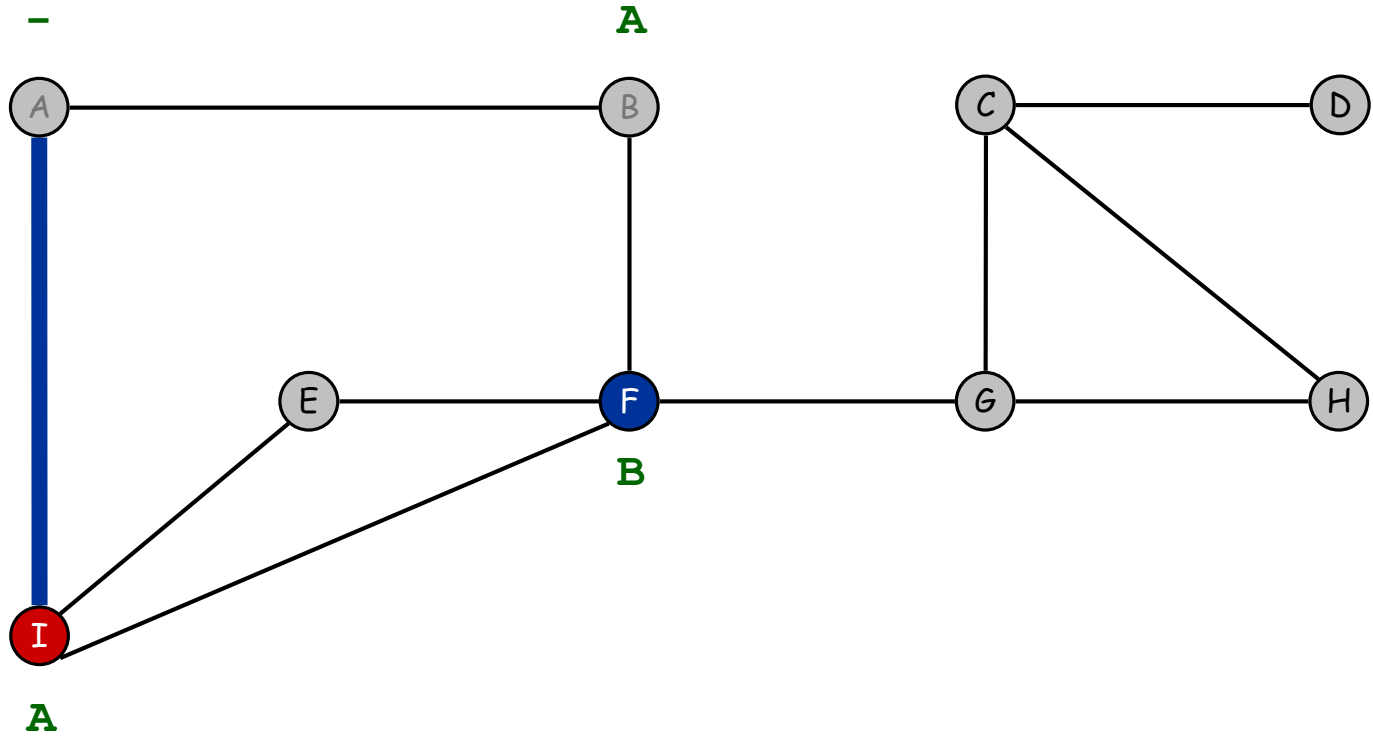
visit neighbors of I

front

F

FIFO Queue

Breadth First Search



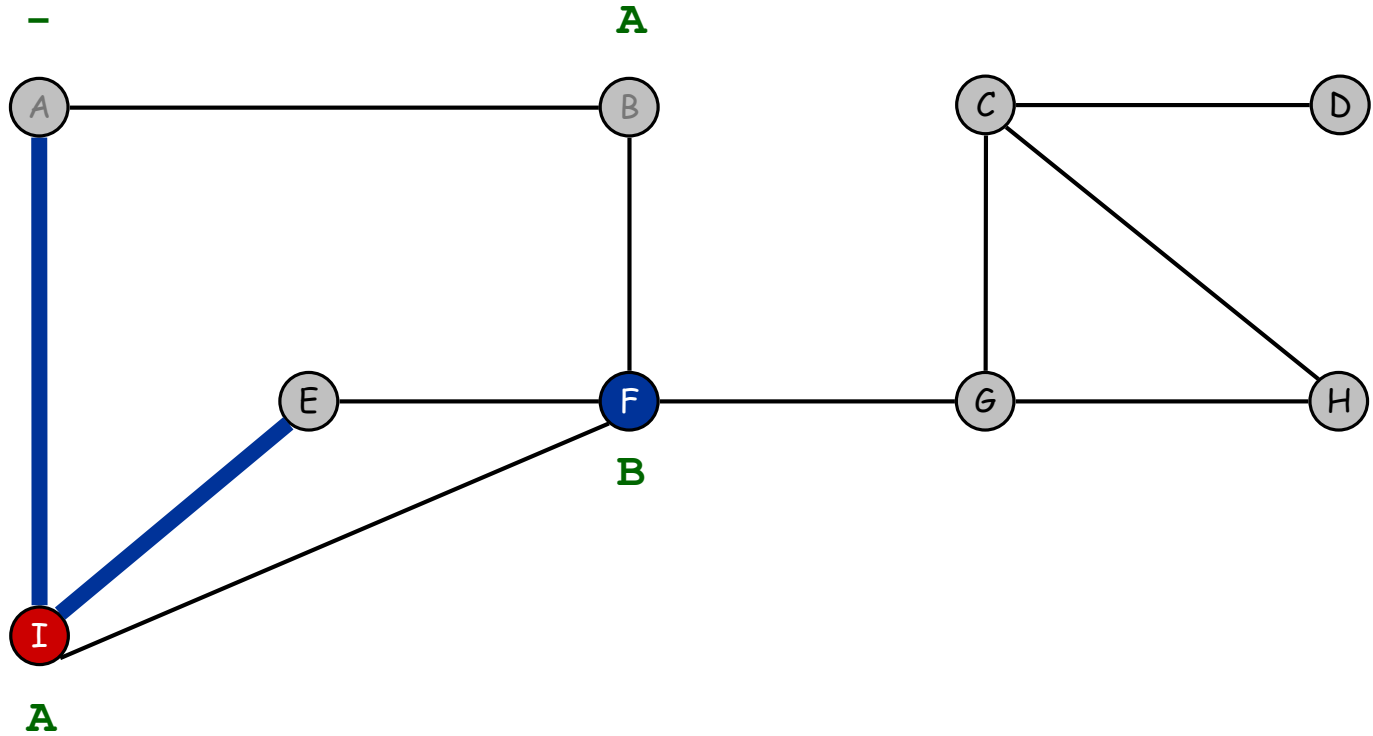
A already discovered

front

F

FIFO Queue

Breadth First Search



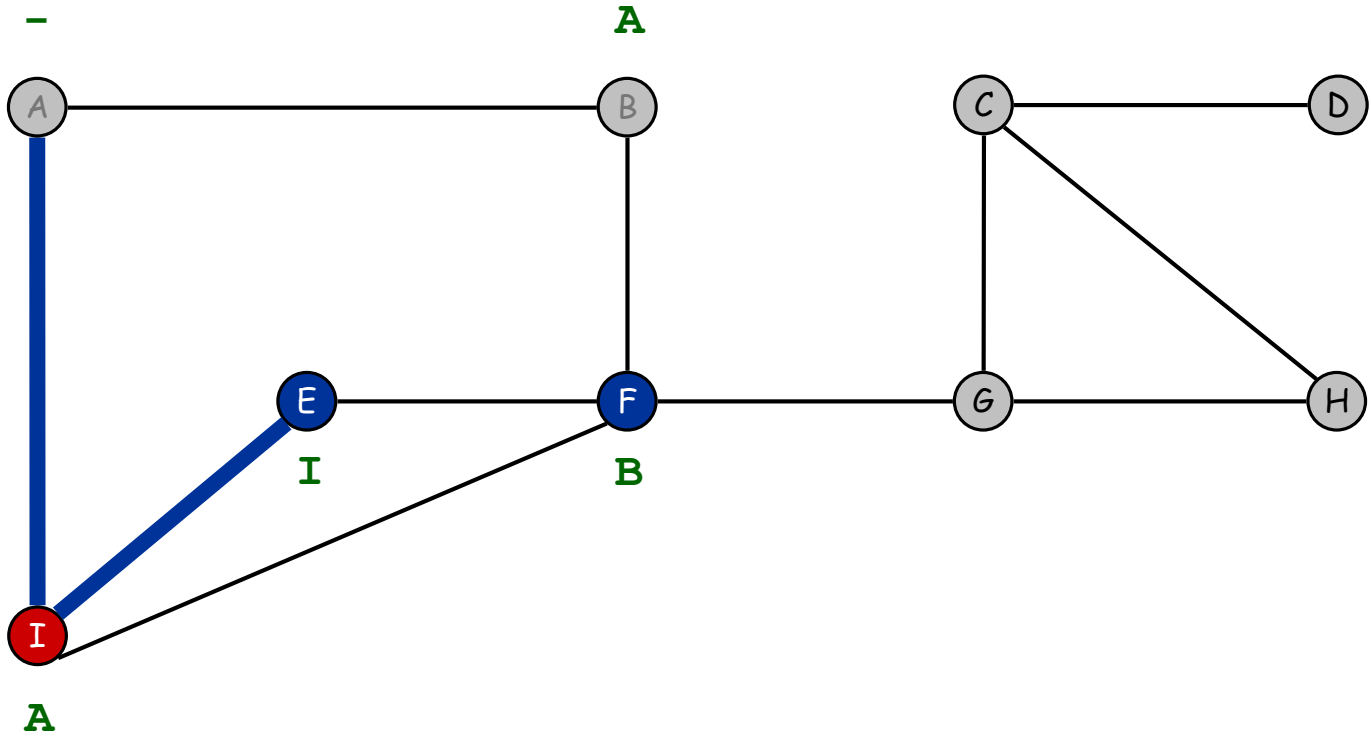
visit neighbors of I

front

F

FIFO Queue

Breadth First Search



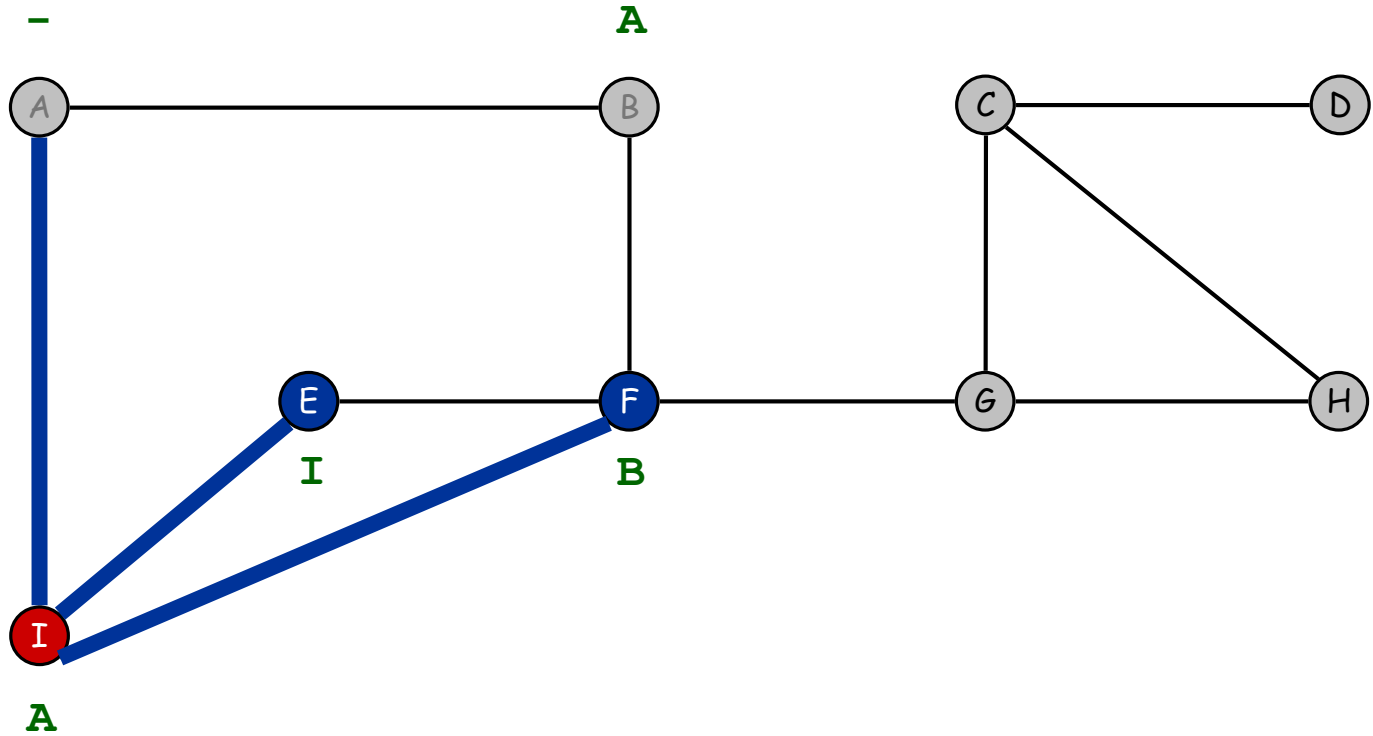
E discovered

front

F E

FIFO Queue

Breadth First Search



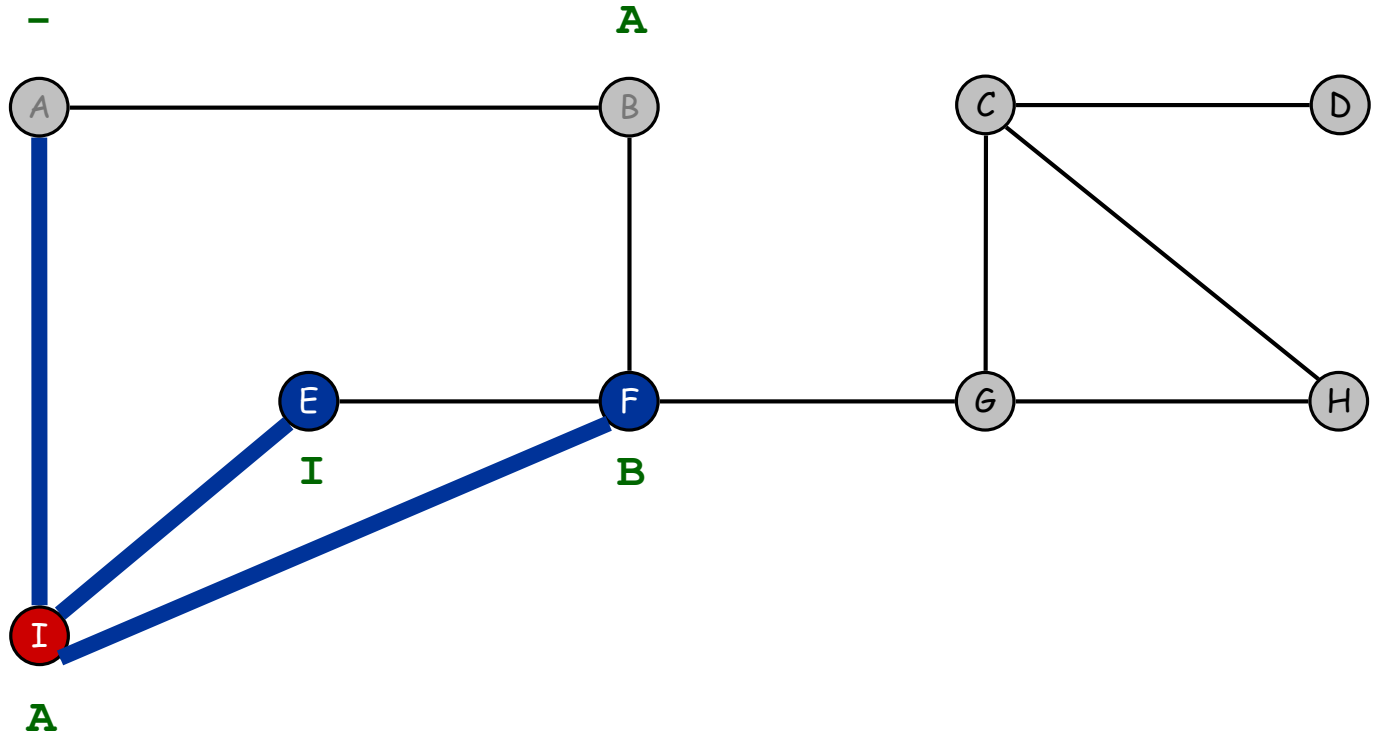
visit neighbors of I

front

F E

FIFO Queue

Breadth First Search



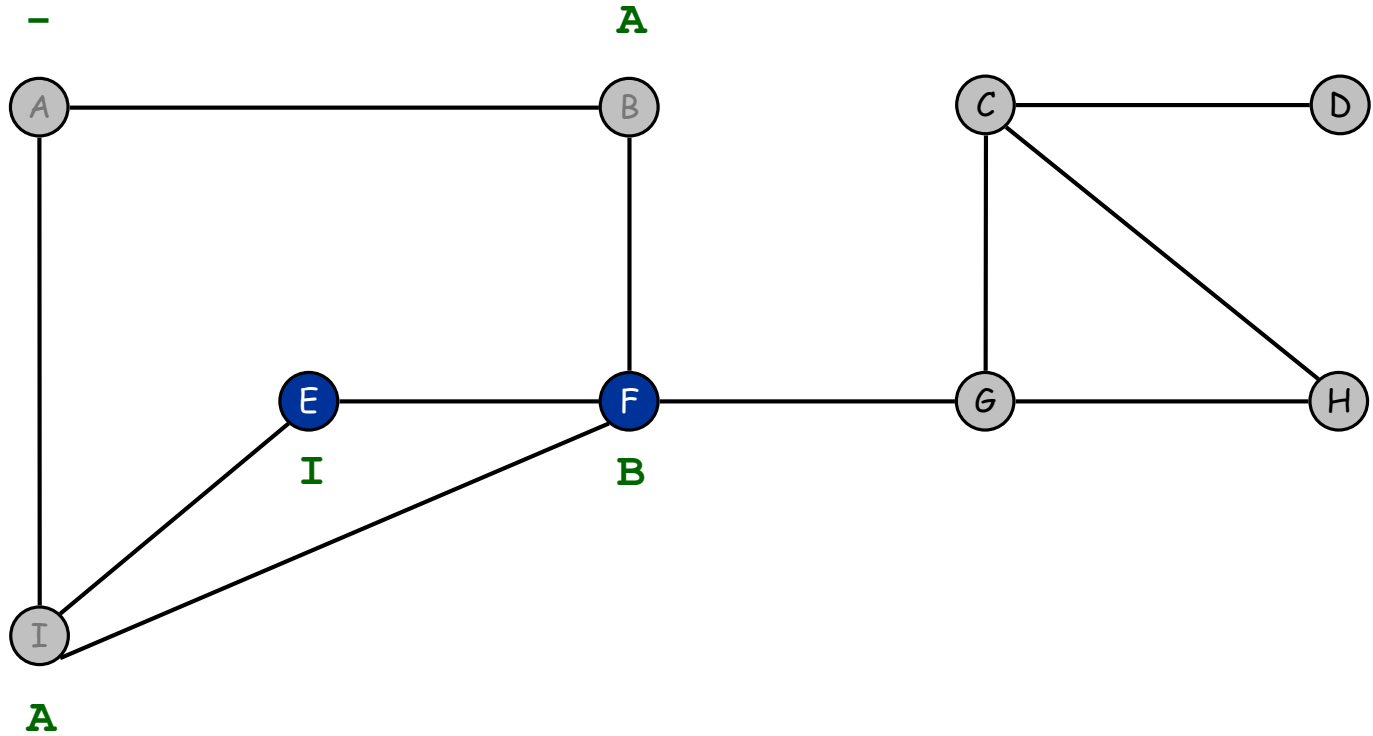
F already discovered

front

F E

FIFO Queue

Breadth First Search



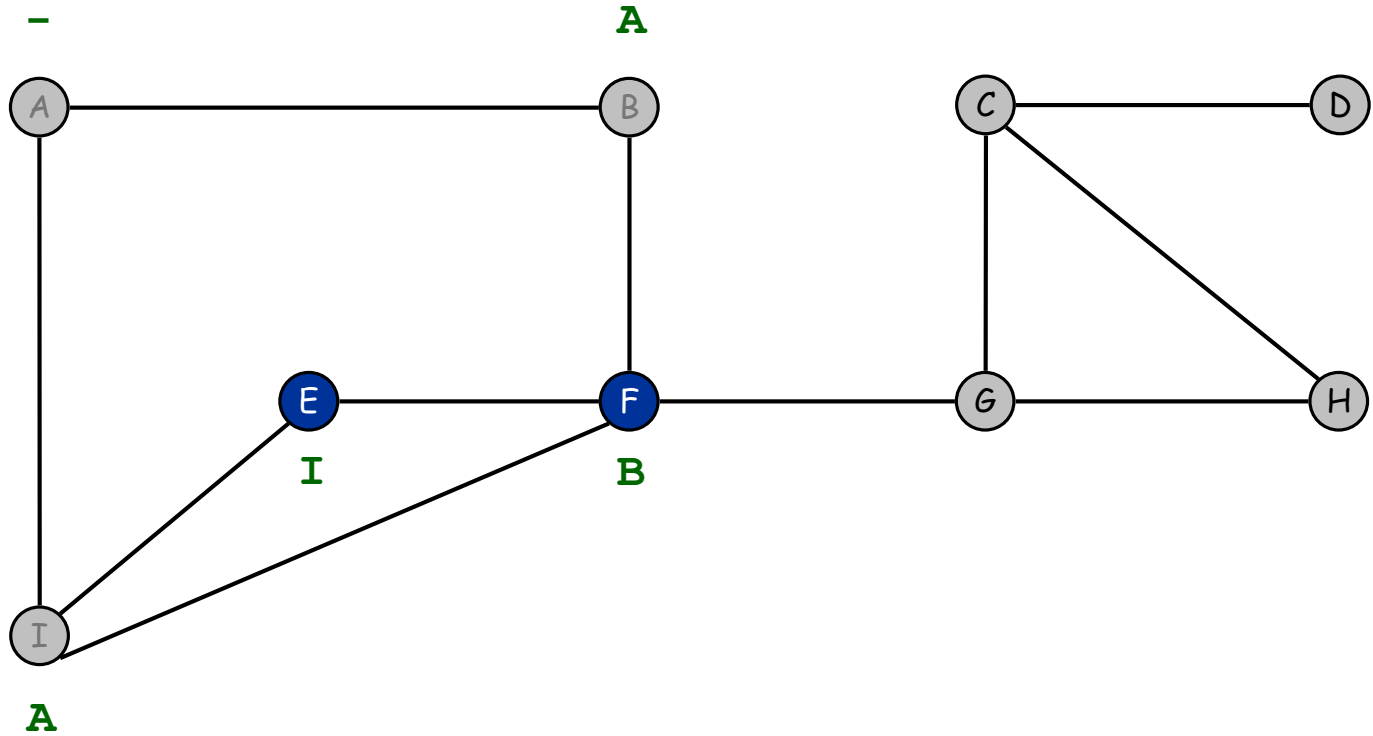
I finished

front

F E

FIFO Queue

Breadth First Search



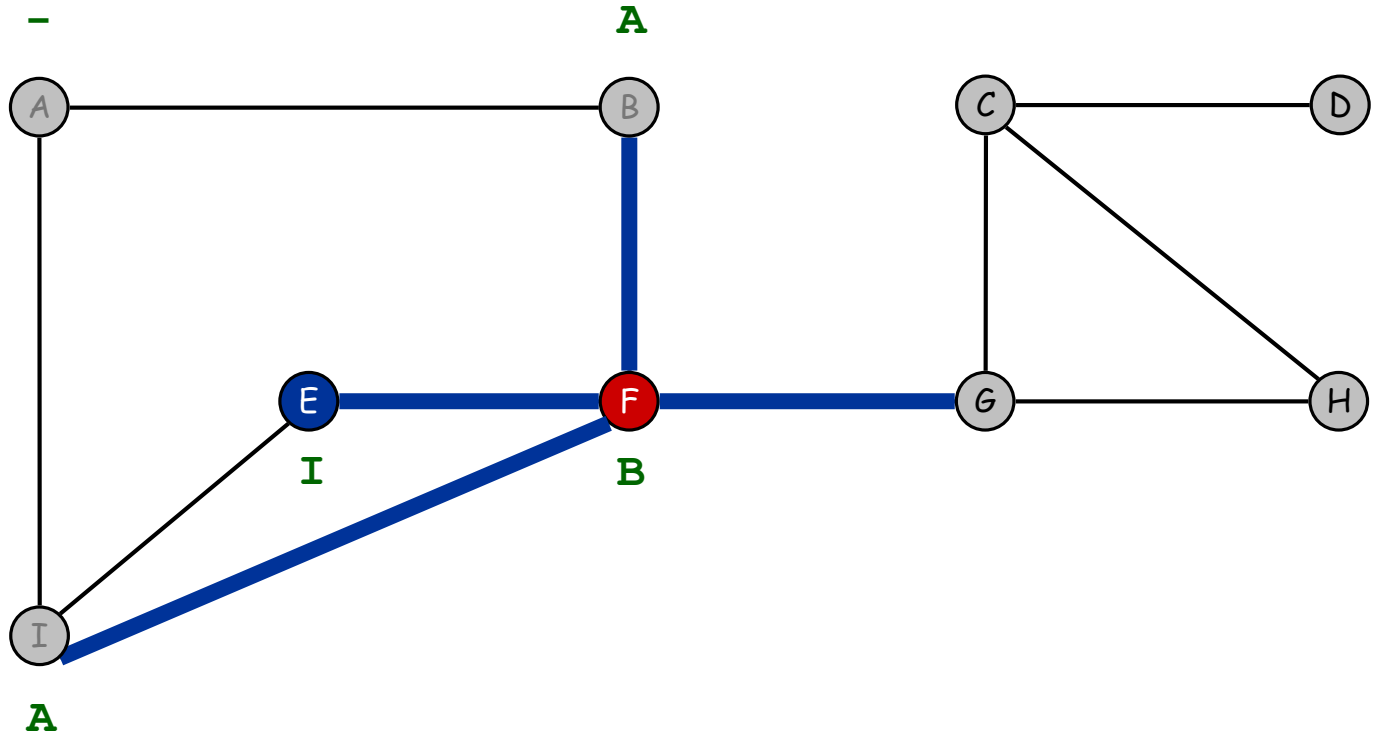
dequeue next vertex

front

F E

FIFO Queue

Breadth First Search



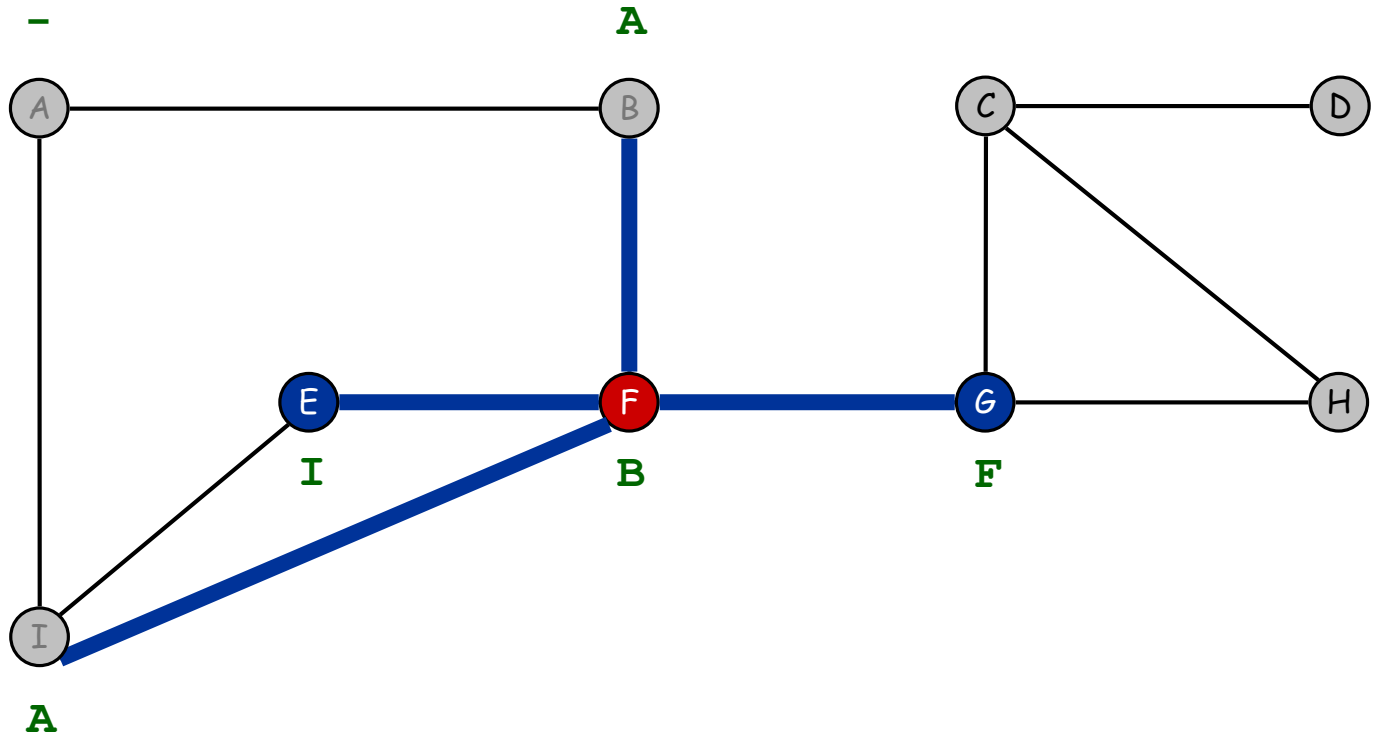
visit neighbors of F

front

E

FIFO Queue

Breadth First Search



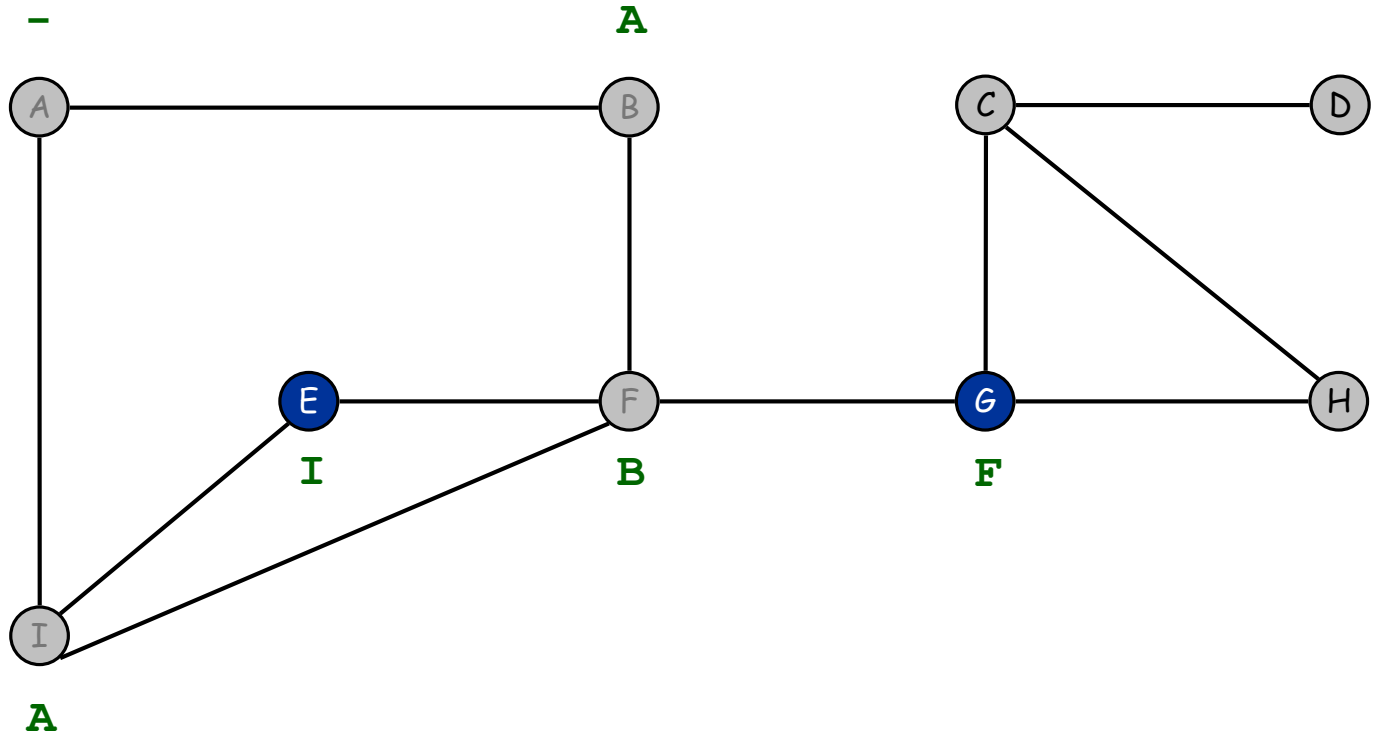
G discovered

front

E G

FIFO Queue

Breadth First Search



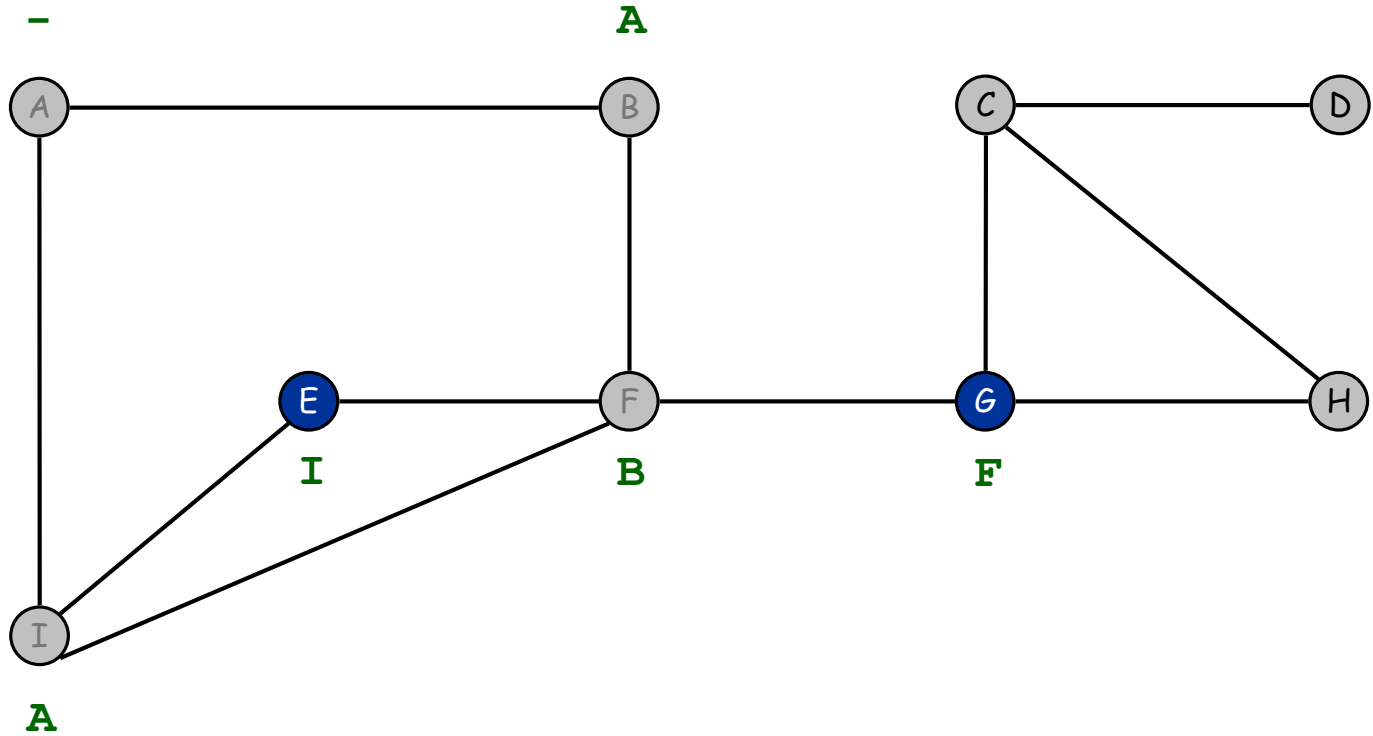
F finished

front

E G

FIFO Queue

Breadth First Search



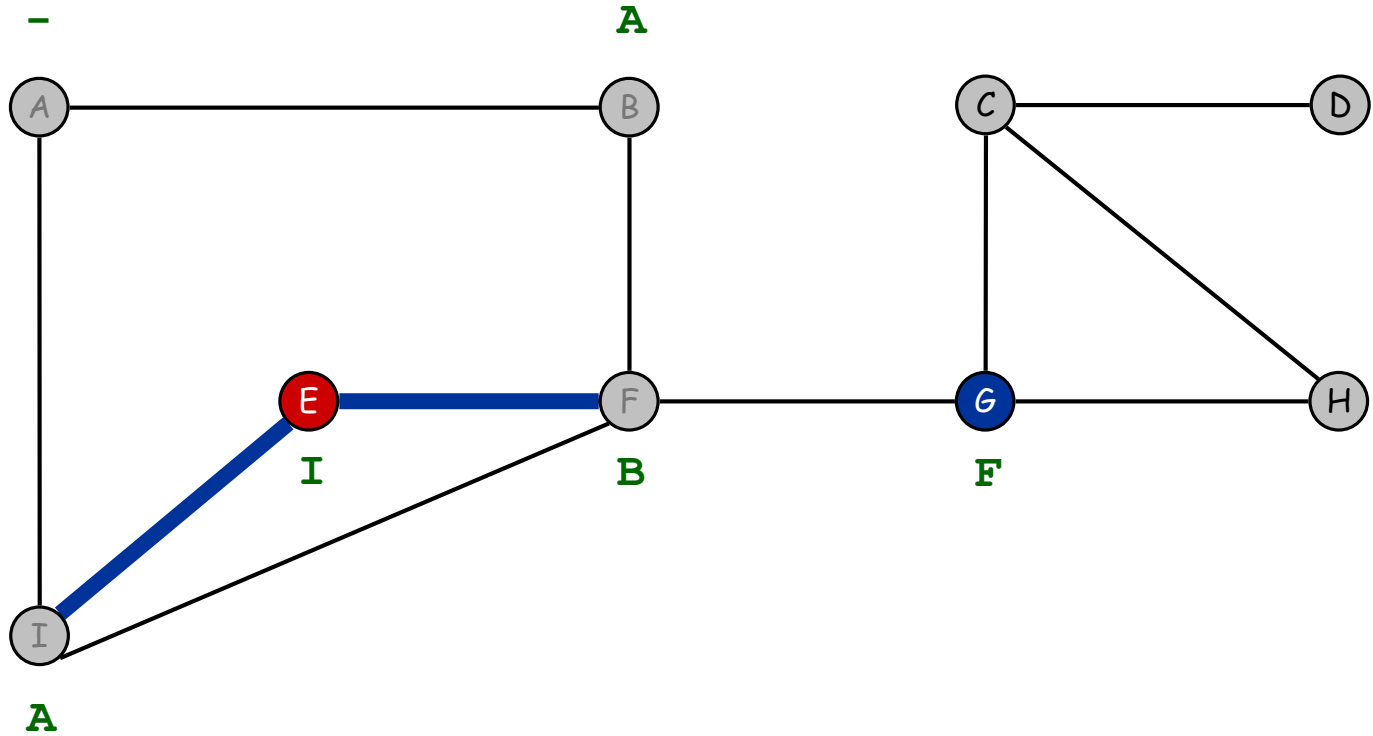
dequeue next vertex

front

E G

FIFO Queue

Breadth First Search



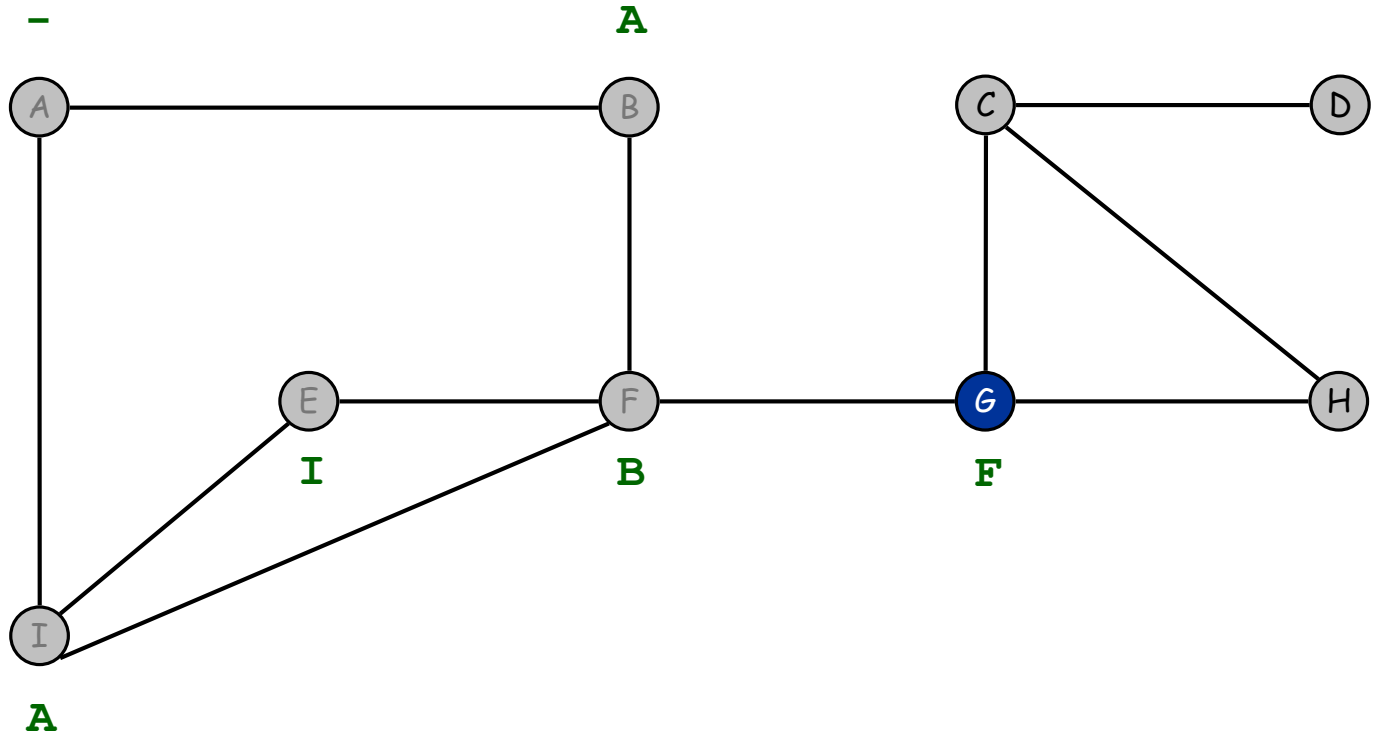
visit neighbors of E

front

G

FIFO Queue

Breadth First Search



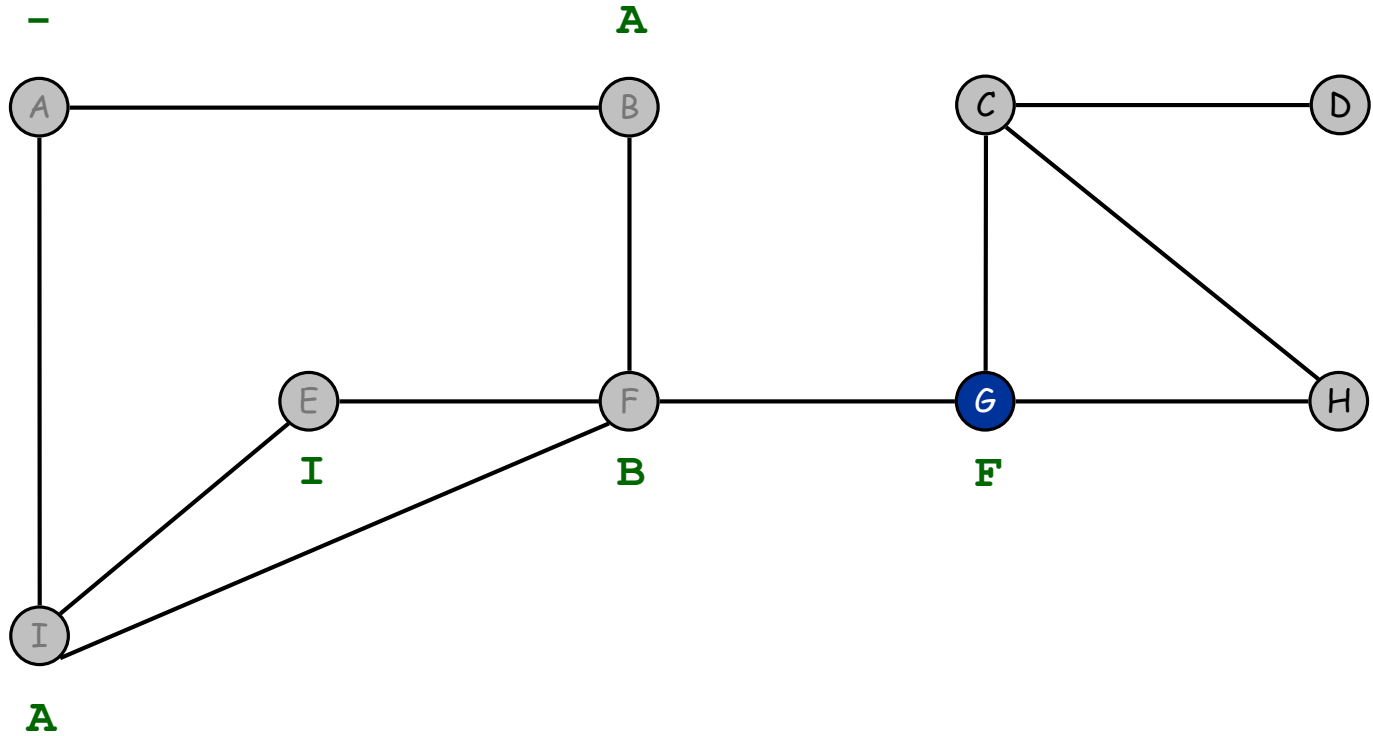
E finished

front

G

FIFO Queue

Breadth First Search



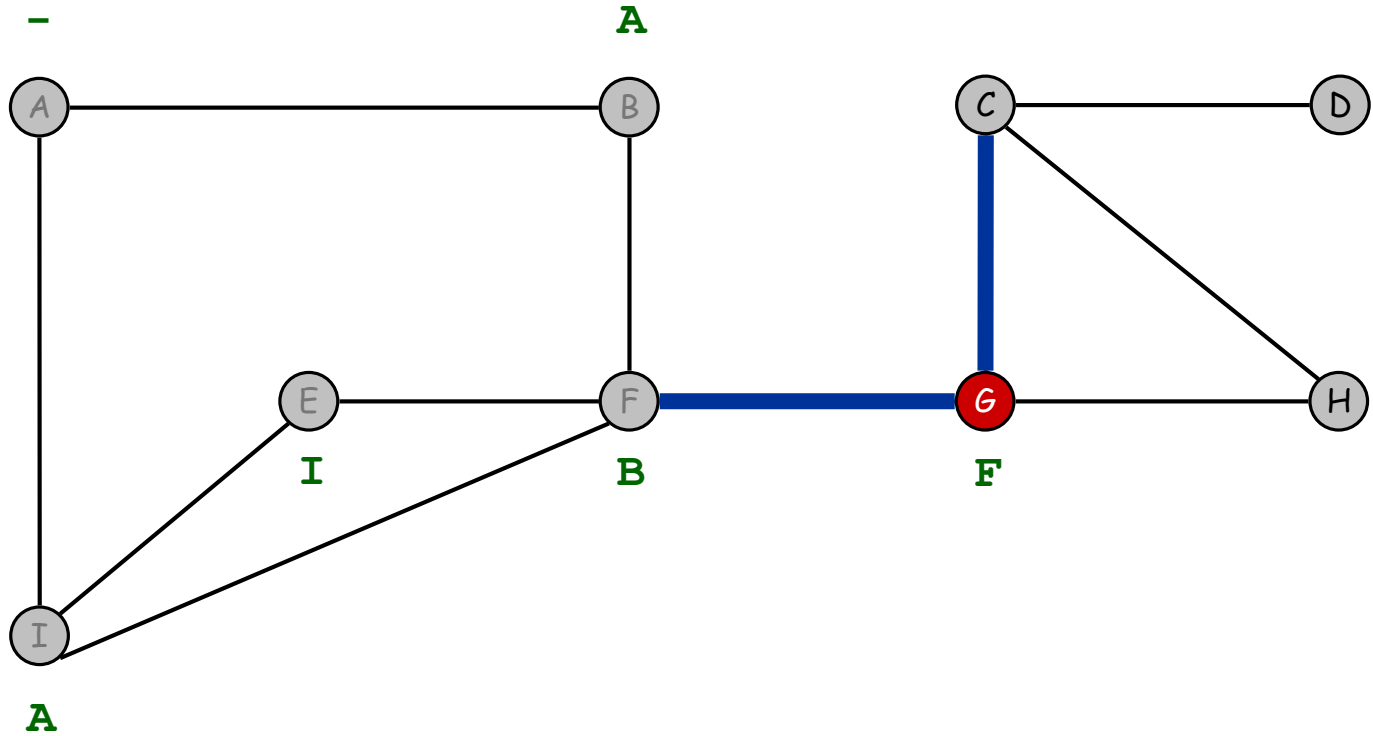
dequeue next vertex

front

G

FIFO Queue

Breadth First Search

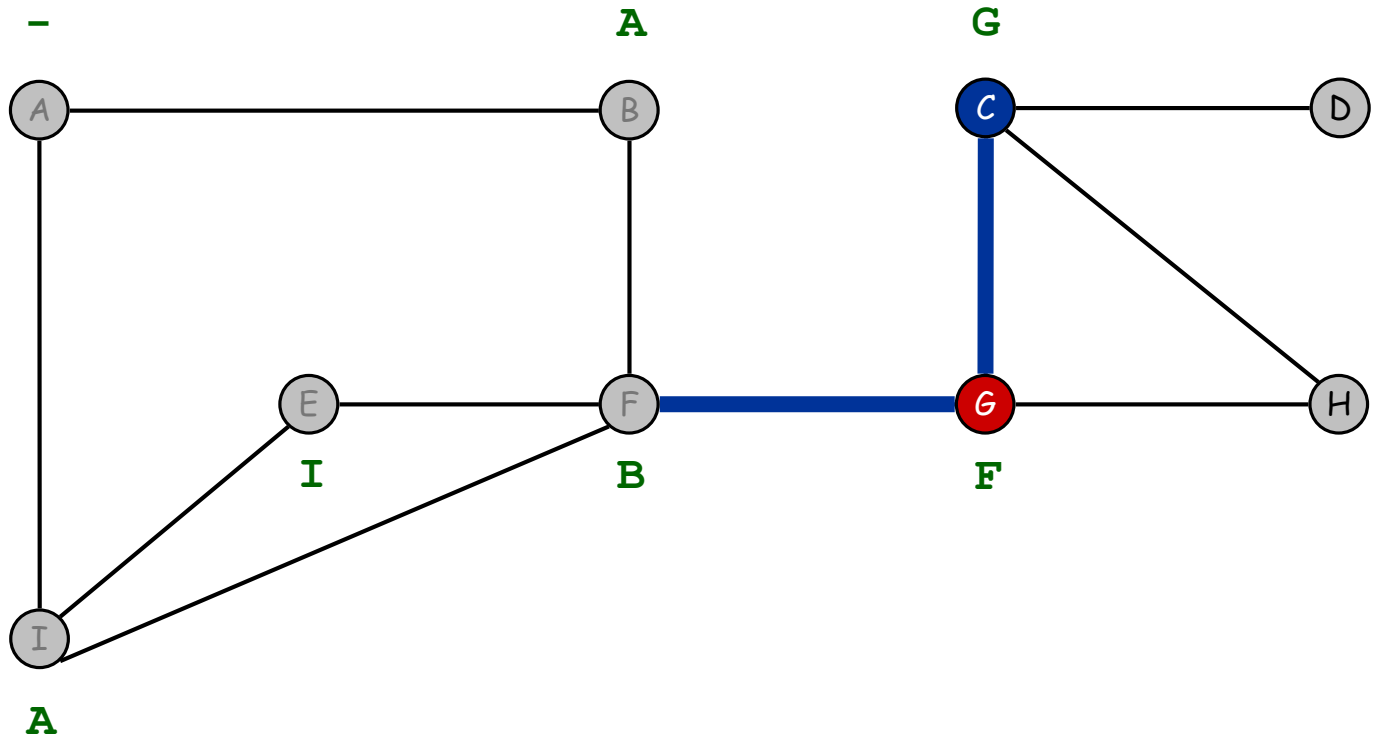


visit neighbors of G

front

FIFO Queue

Breadth First Search



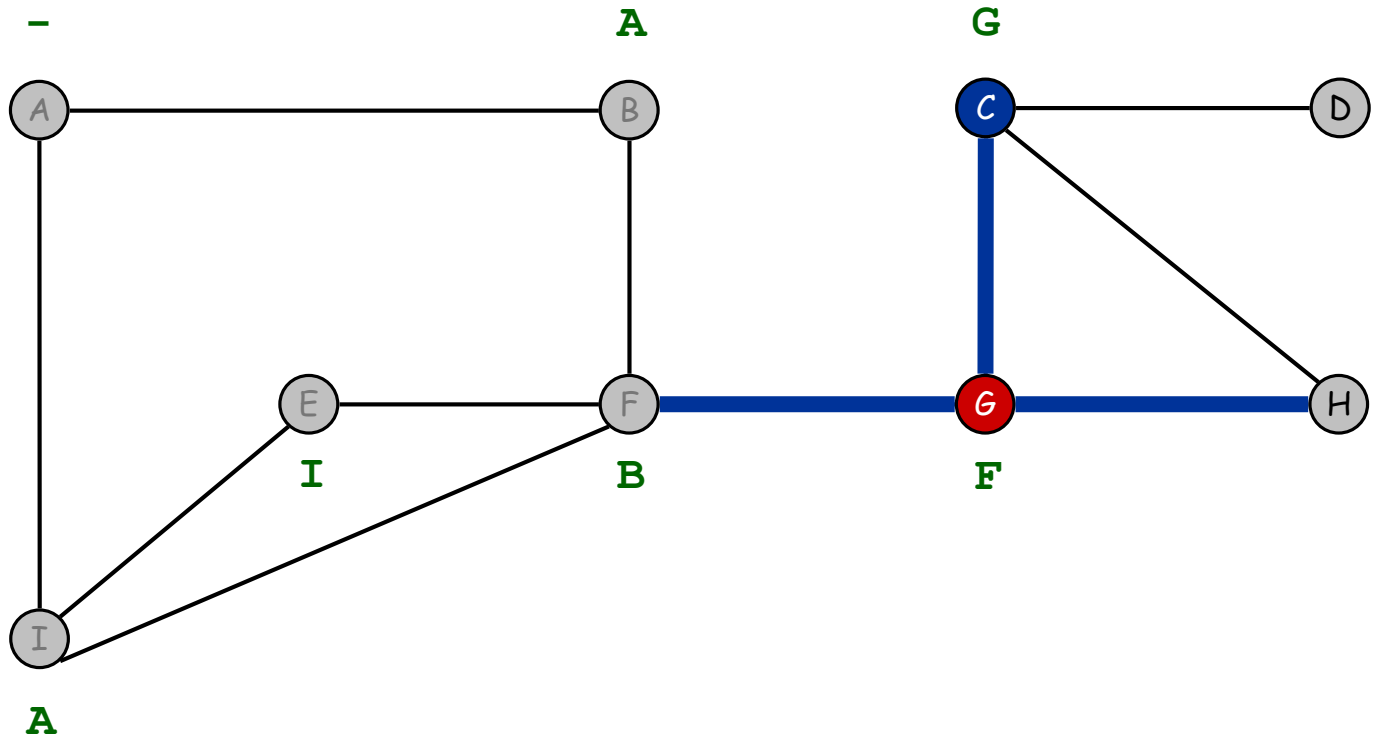
C discovered

front

C

FIFO Queue

Breadth First Search



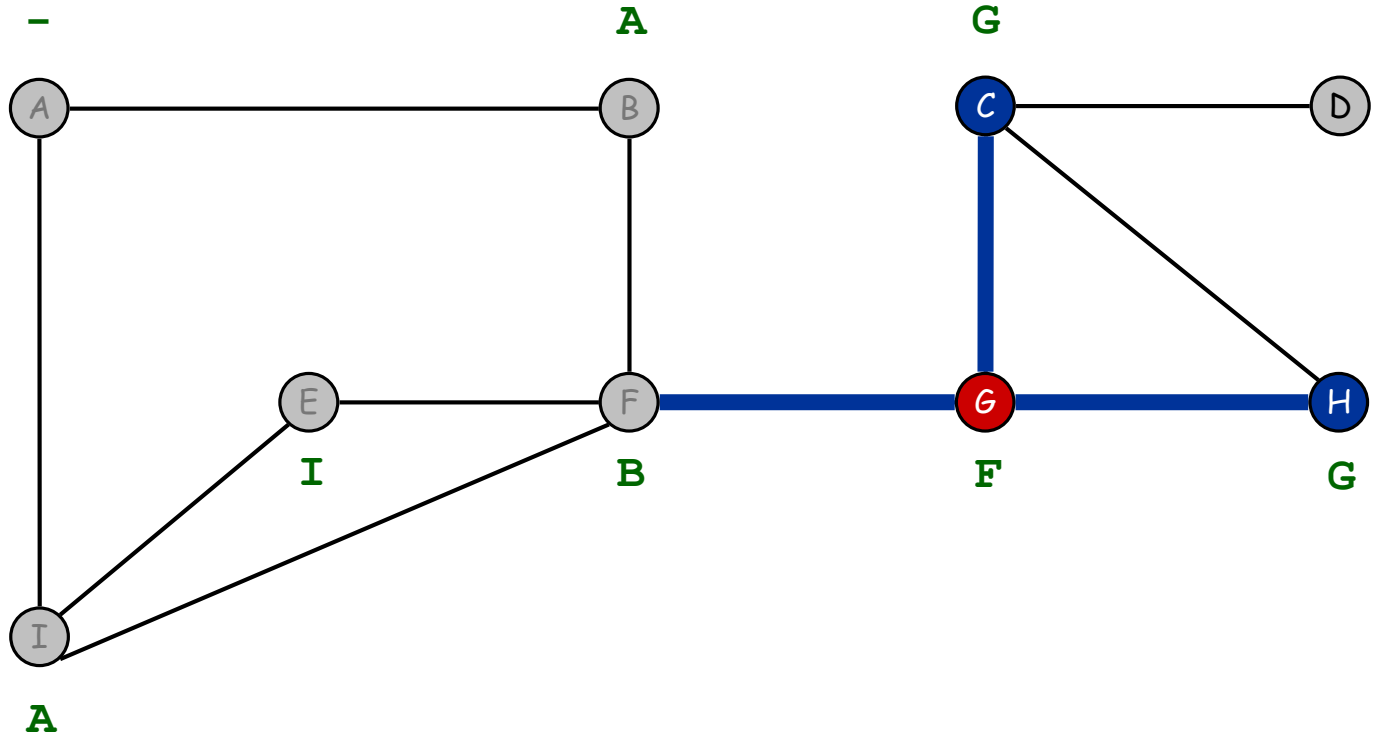
visit neighbors of G

front

C

FIFO Queue

Breadth First Search



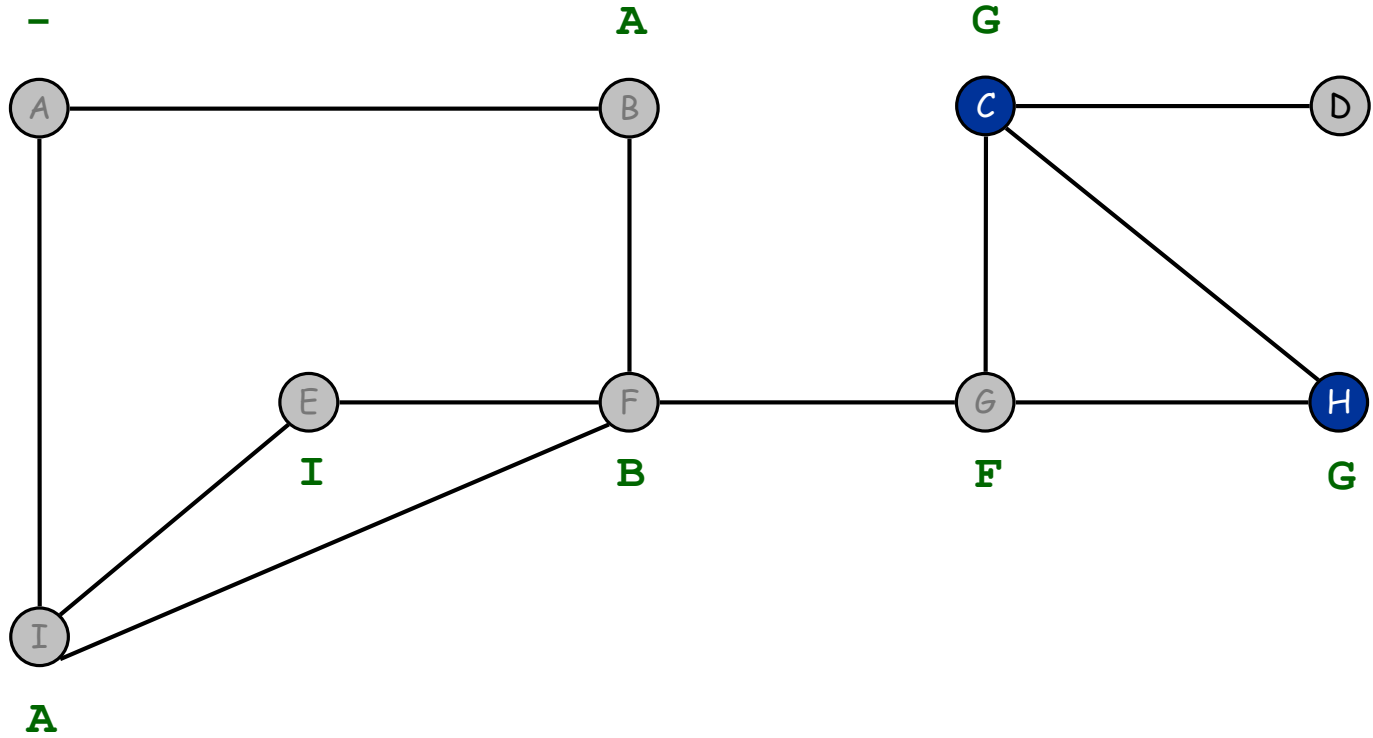
H discovered

front

C H

FIFO Queue

Breadth First Search



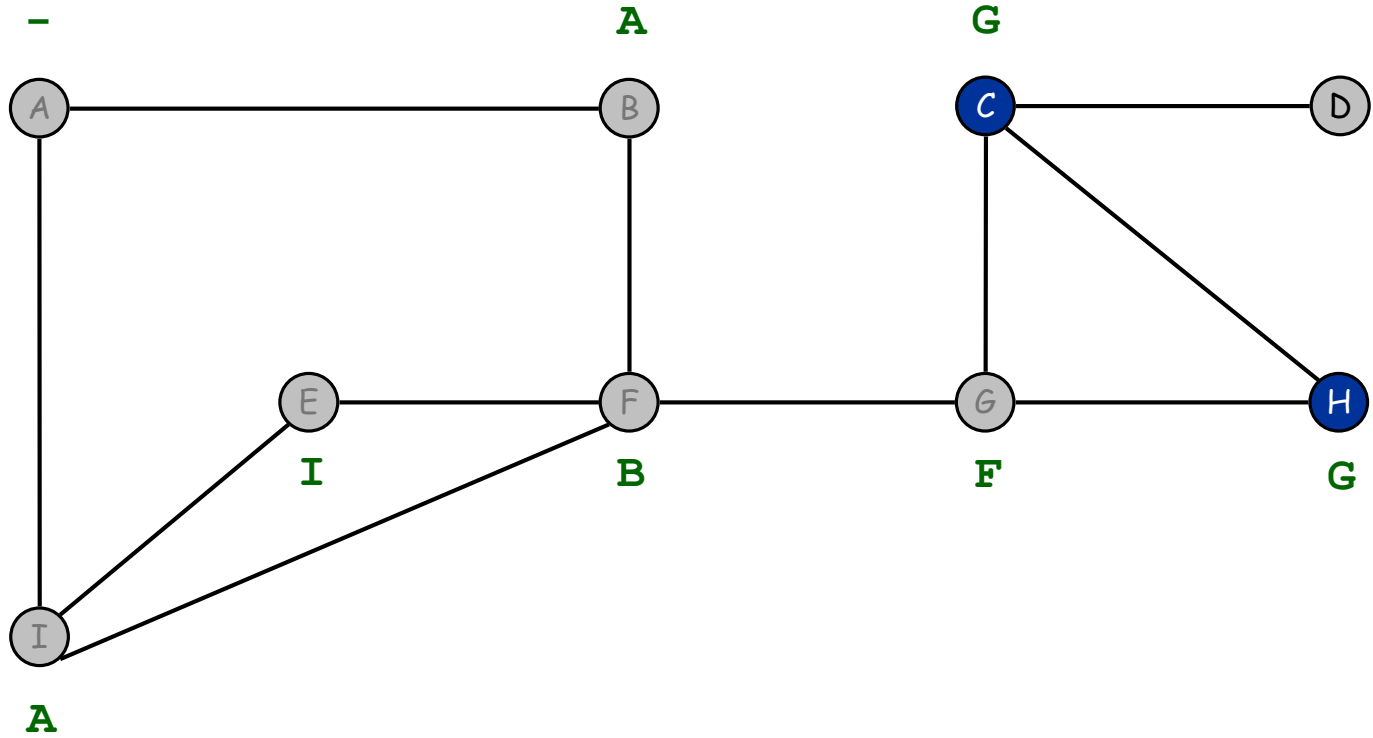
G finished

front

C H

FIFO Queue

Breadth First Search



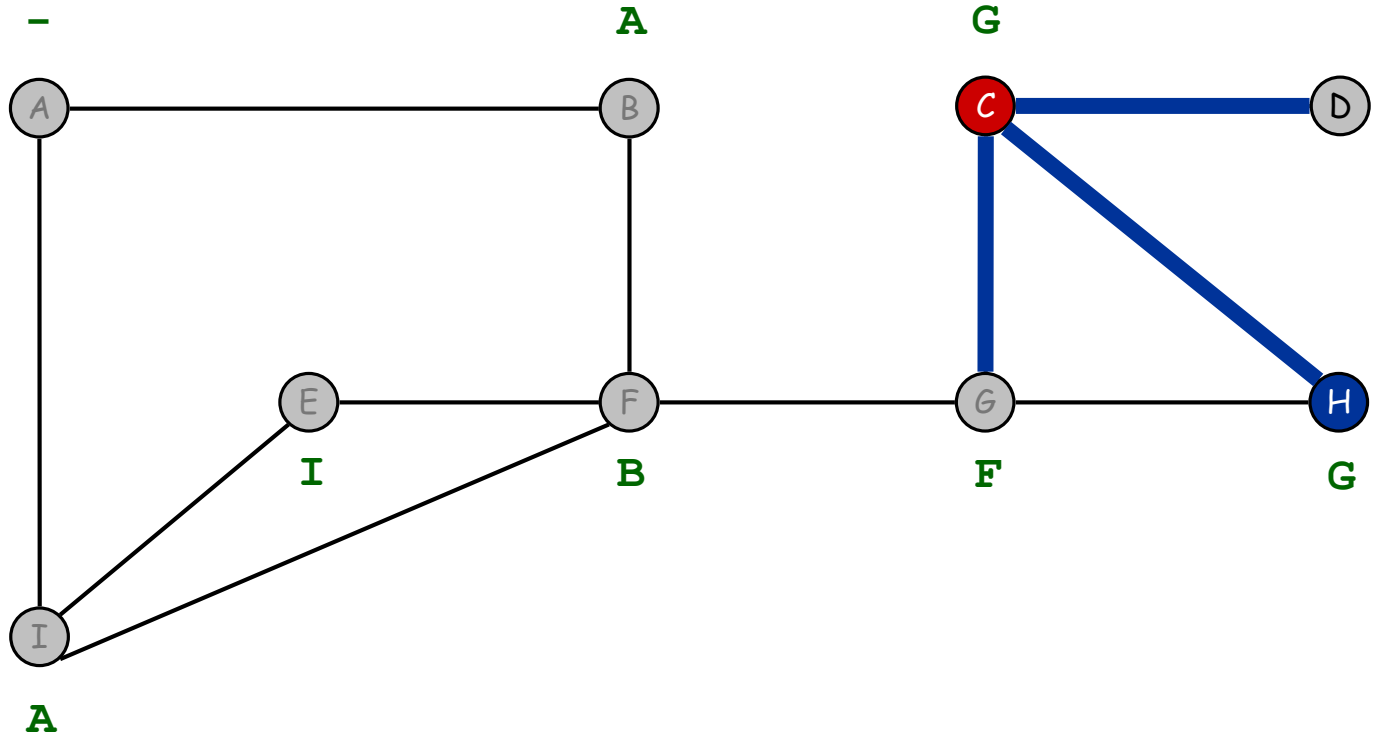
dequeue next vertex

front

C H

FIFO Queue

Breadth First Search



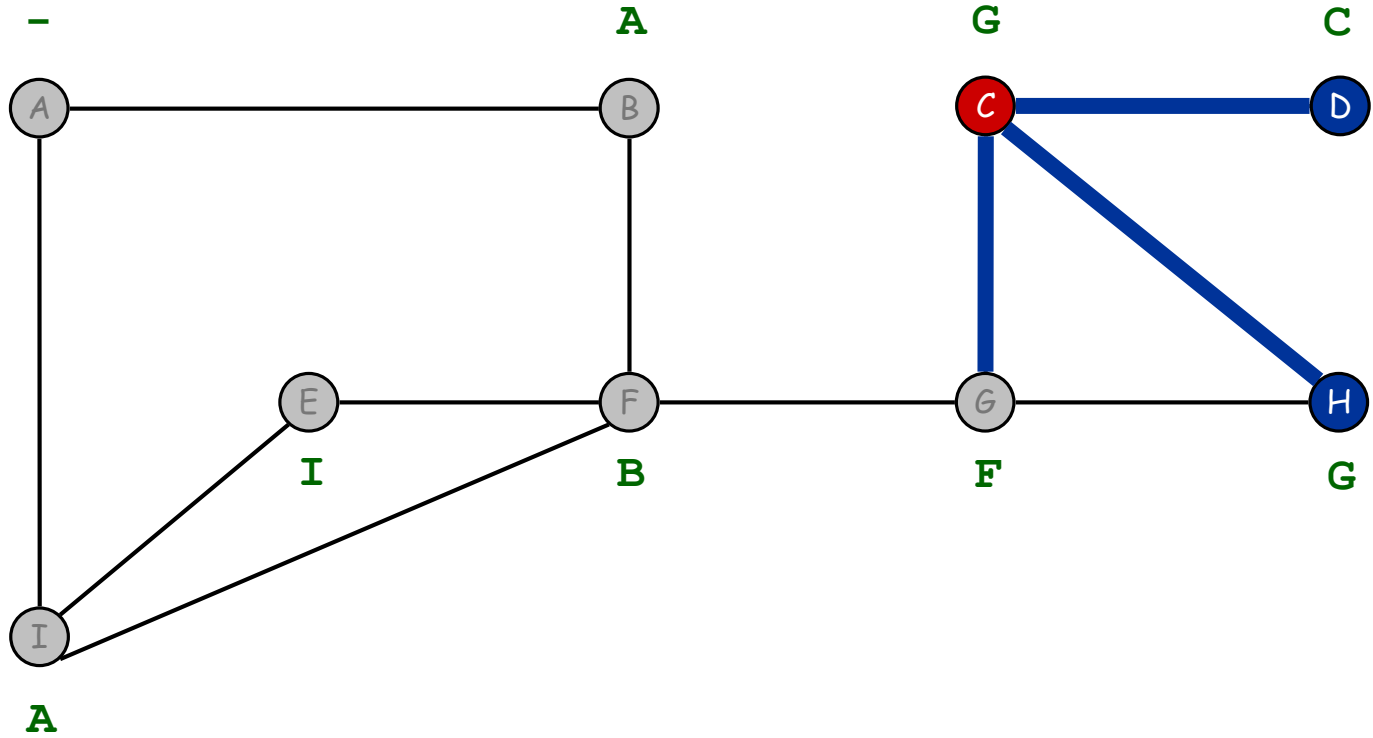
visit neighbors of C

front

H

FIFO Queue

Breadth First Search



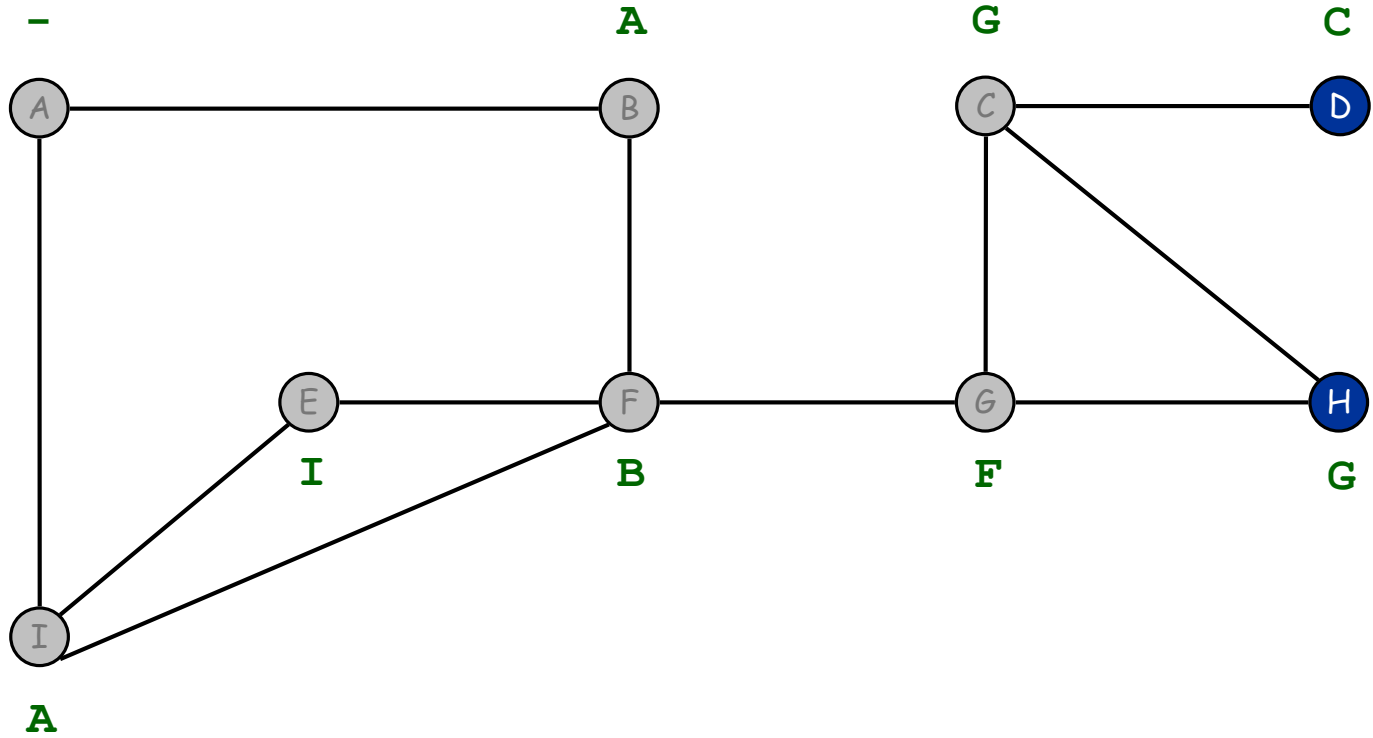
D discovered

front

H D

FIFO Queue

Breadth First Search



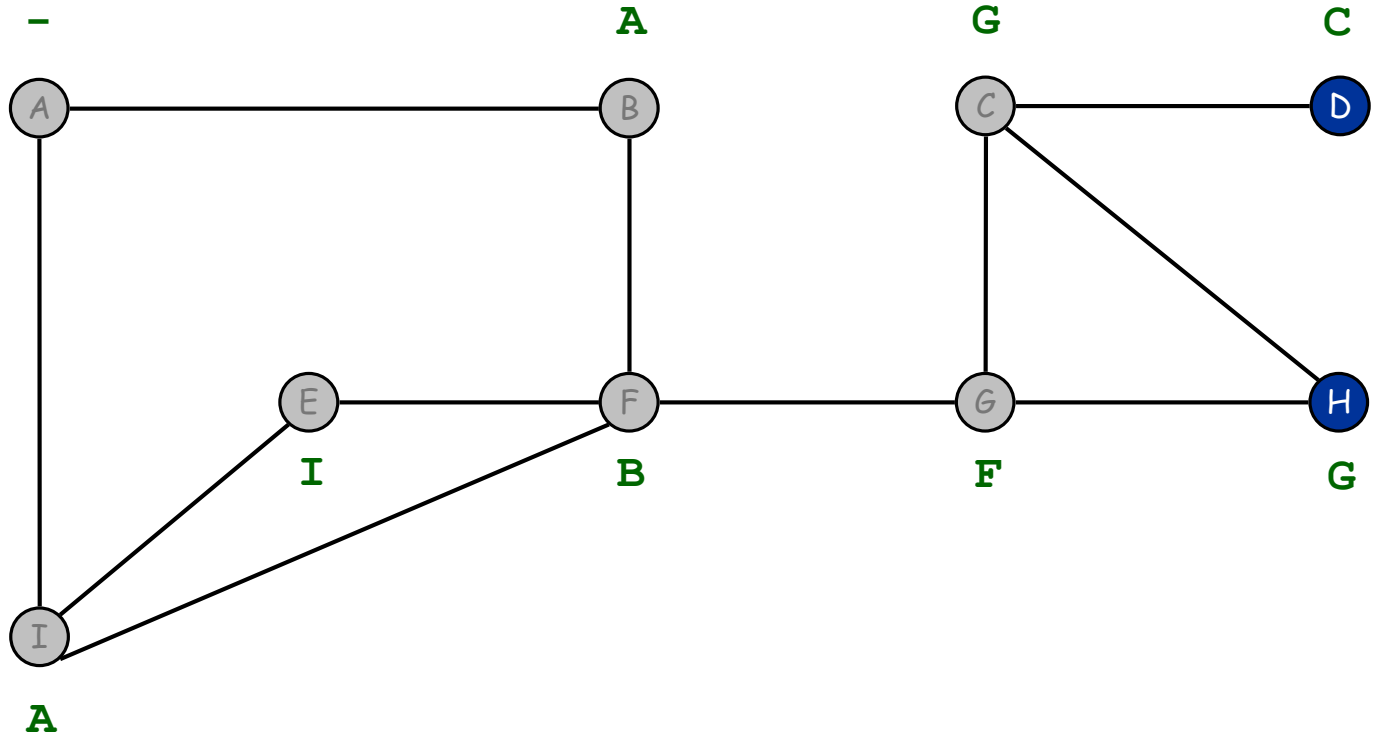
C finished

front

H D

FIFO Queue

Breadth First Search



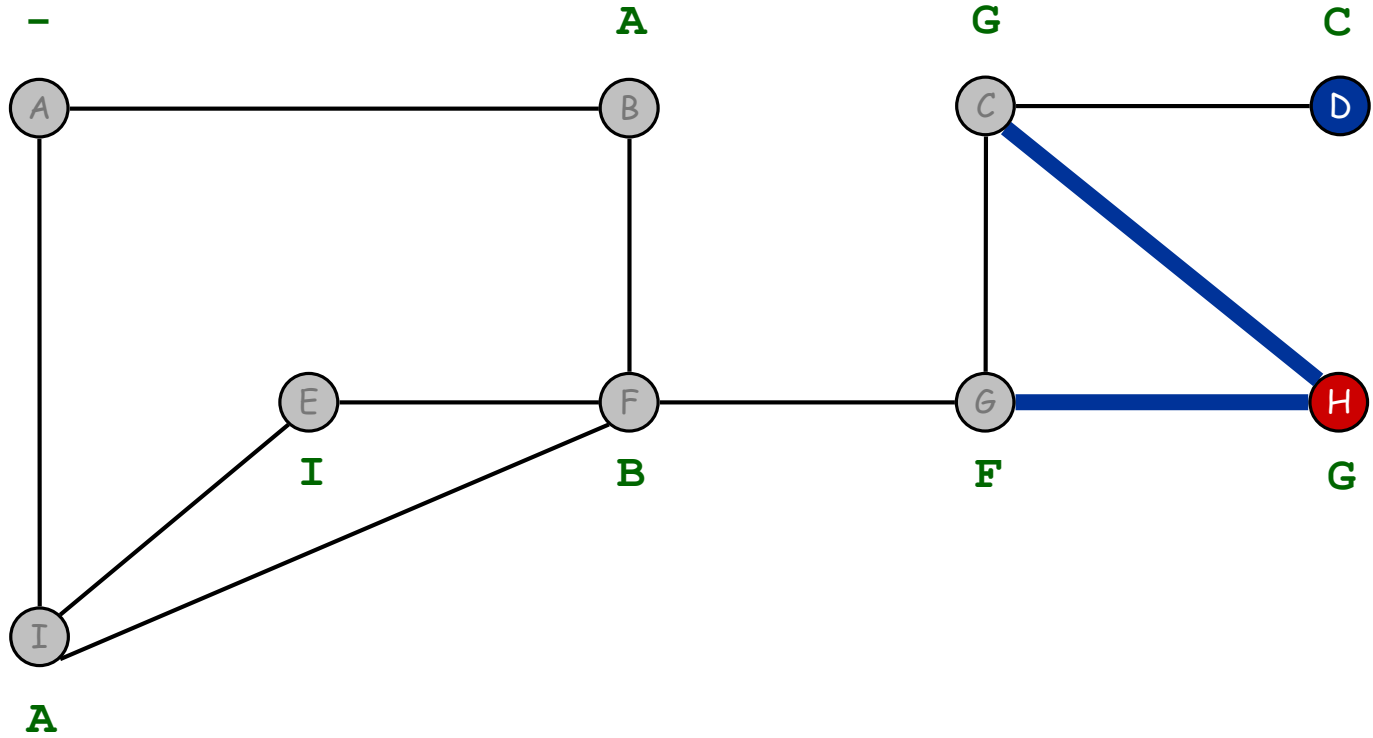
get next vertex

front

H D

FIFO Queue

Breadth First Search



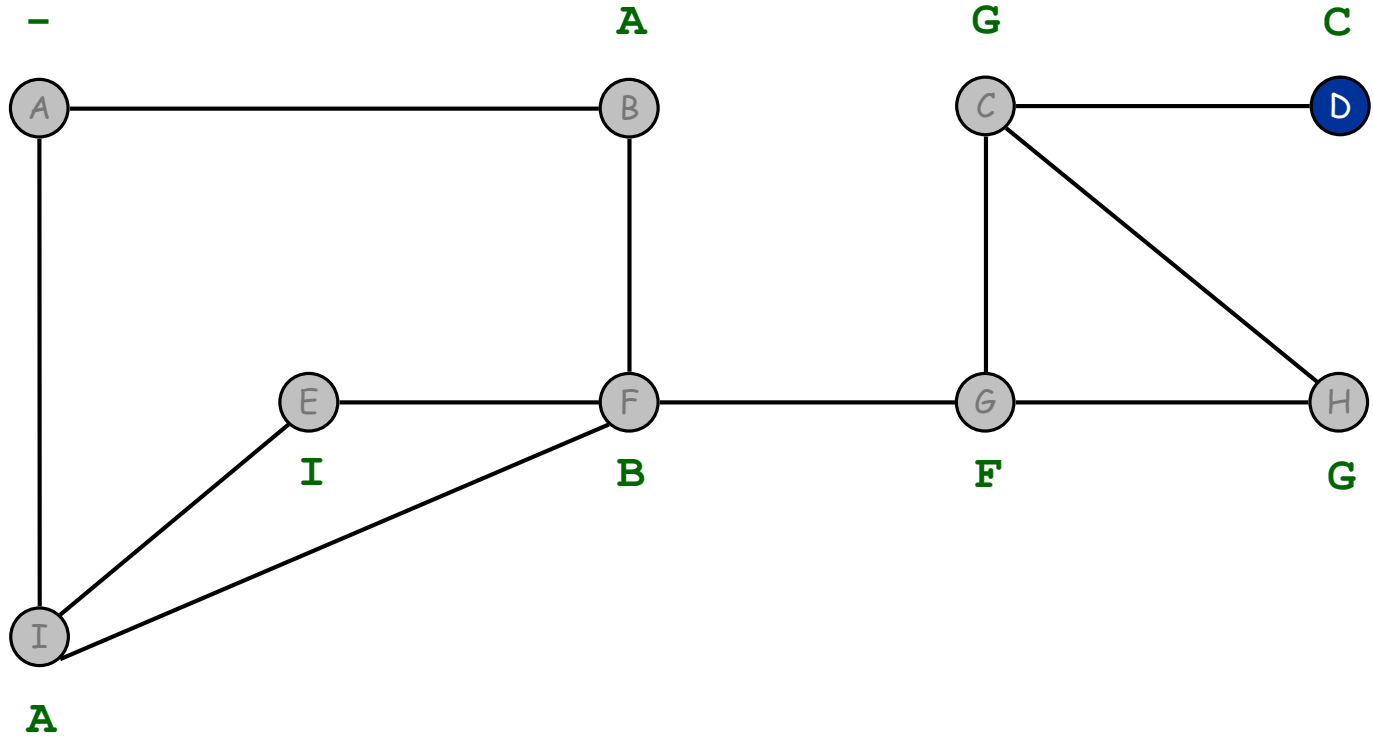
visit neighbors of H

front

D

FIFO Queue

Breadth First Search



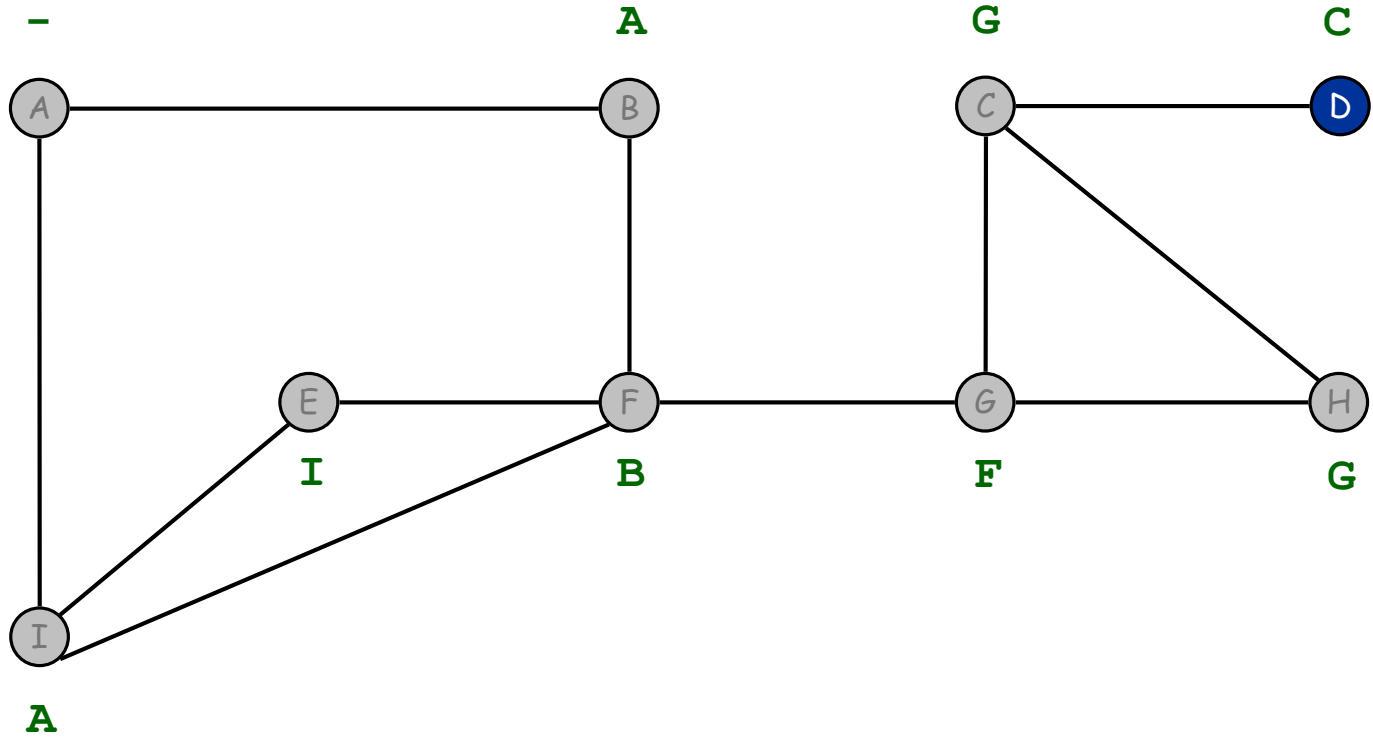
finished H

front

D

FIFO Queue

Breadth First Search



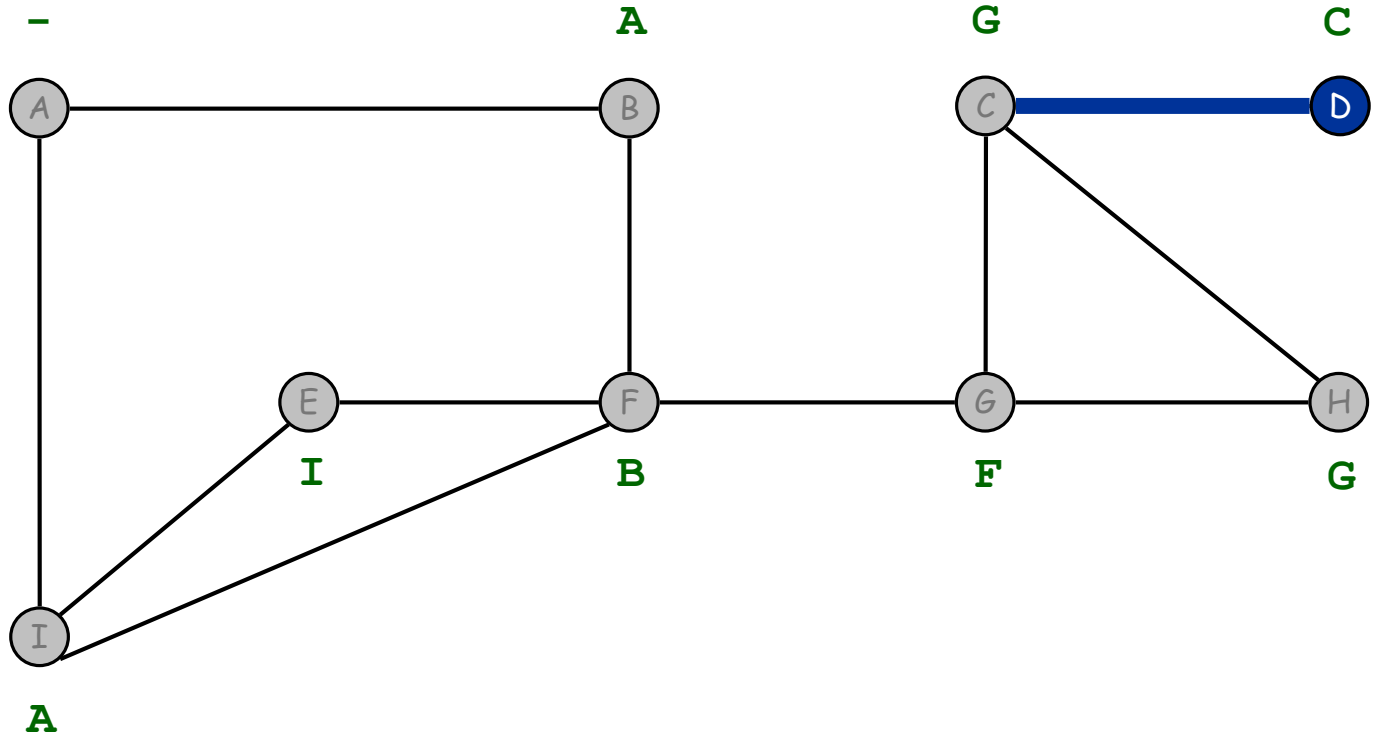
dequeue next vertex

front

D

FIFO Queue

Breadth First Search

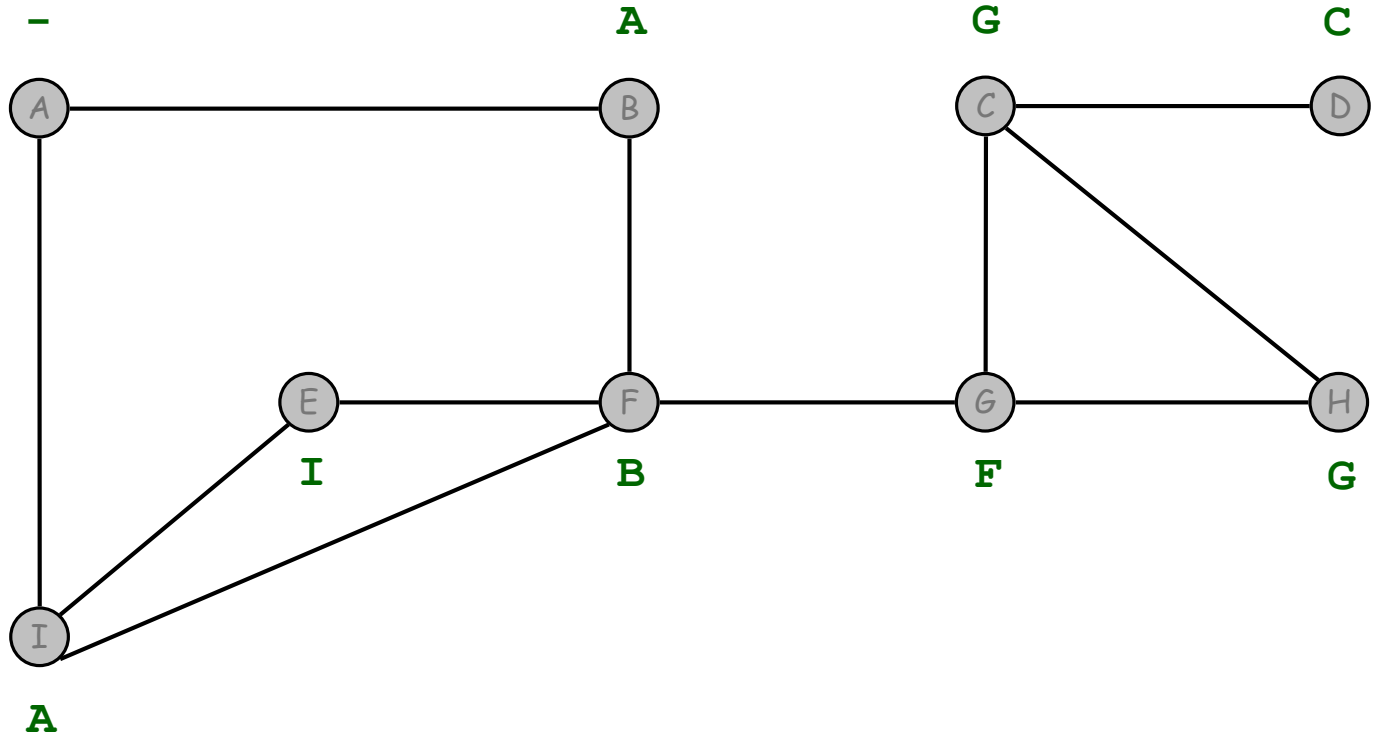


visit neighbors of D

front

FIFO Queue

Breadth First Search

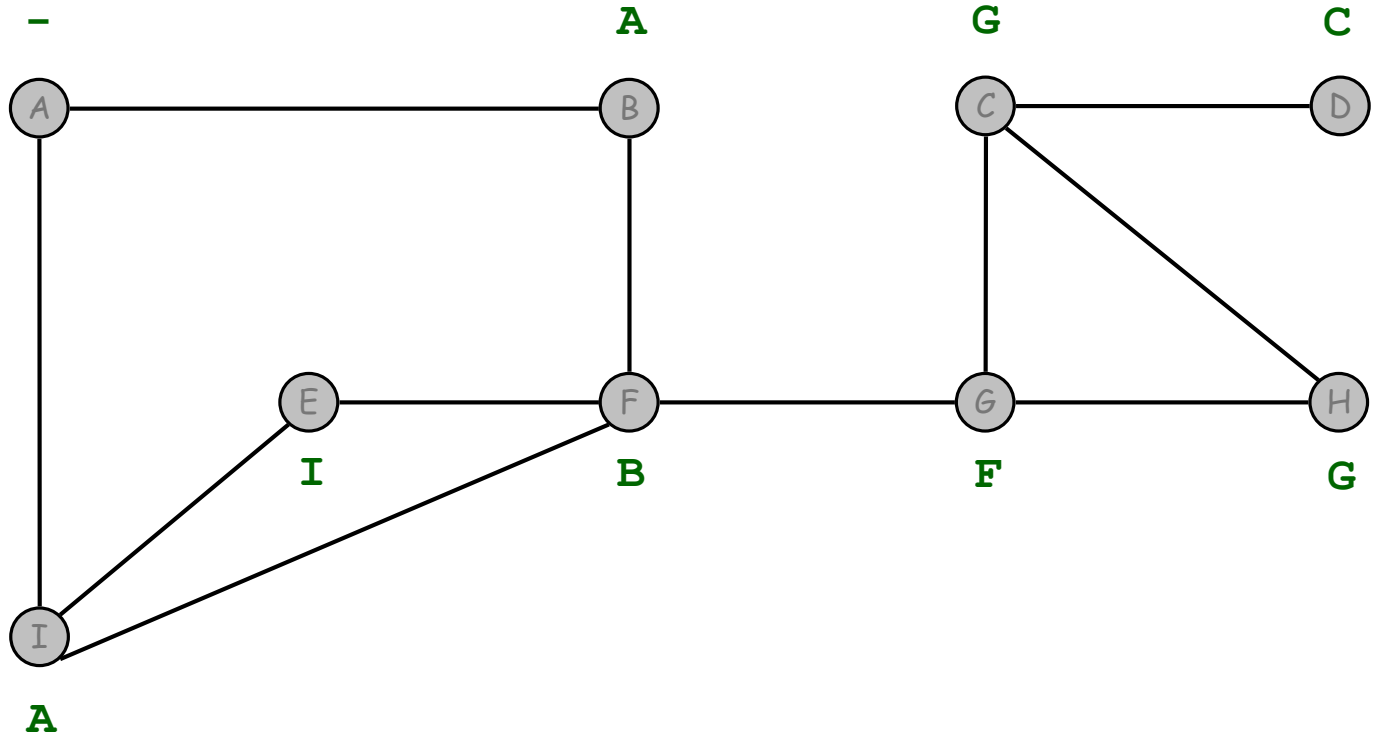


D finished

front

FIFO Queue

Breadth First Search

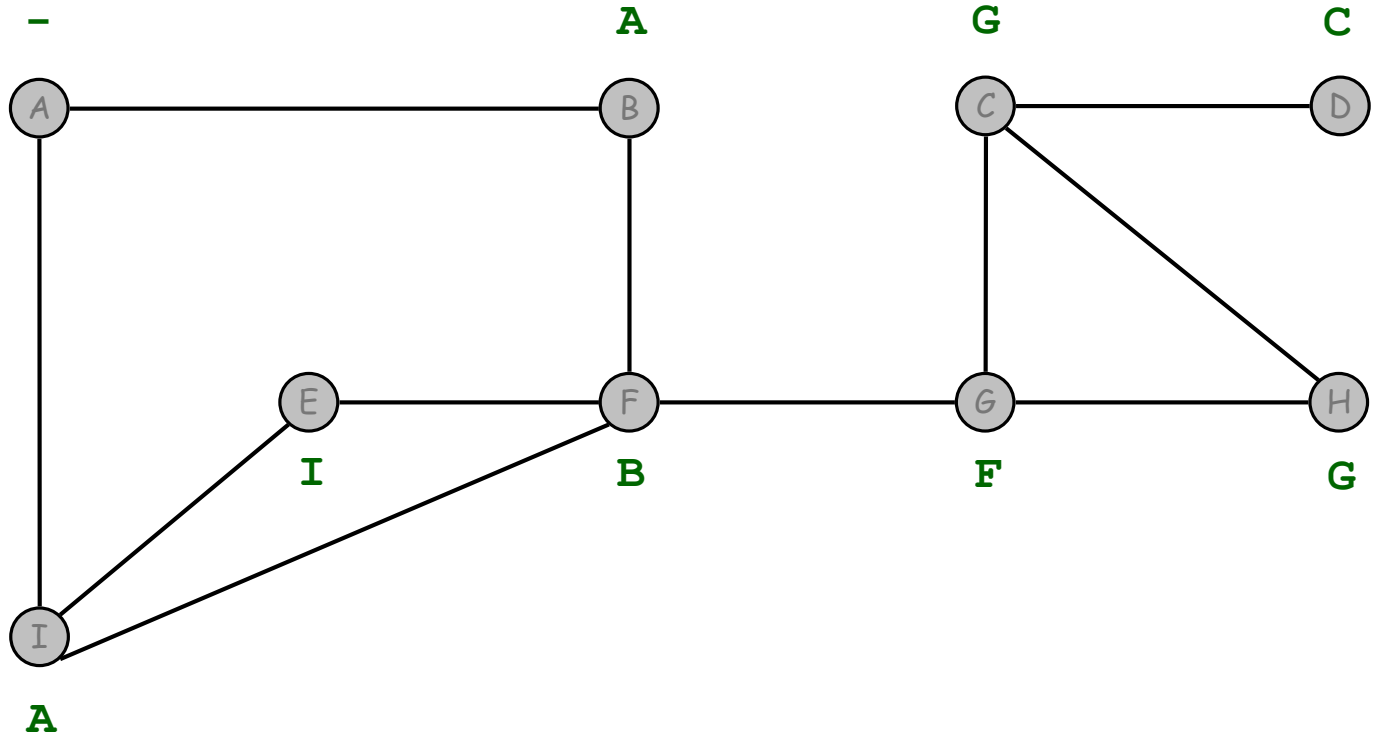


dequeue next vertex

front

FIFO Queue

Breadth First Search



STOP

front

FIFO Queue