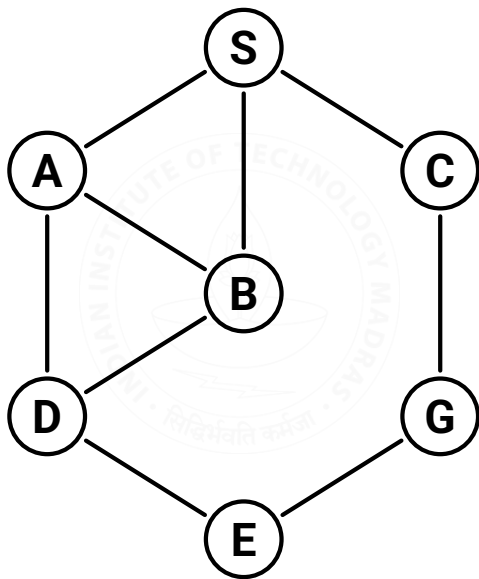


Practice Assignment: Lecture Example 1

Simple Search 1

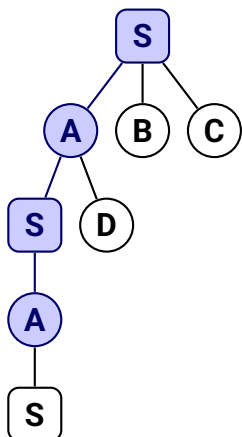
Prepared by S. Baskaran

State Space



X	MoveGen(X)
S	[A, B, C]
A	[S, B, D]
B	[S, A, D]
C	[S, G]
D	[A, B, E]
E	[D, G]
G	[C, E]

Simple-Search-1 – Search Tree



Simple-Search-1 – Solution

OPEN and moveGen are sets. In each iteration, Simple-Search-1 removes one node from OPEN and inspects/expands that node.

In this example, we chose to remove the latest/newest node from OPEN.

OPEN {S}

1.

NODE S

moveGen {A, B, C}

OPEN {A, B, C}

2.

NODE A

moveGen {S, B, D}

OPEN {S, D, B, C}

3.

NODE S

moveGen {A, B, C}

OPEN {A, D, B, C}

4.

NODE A

moveGen {S, B, D}

OPEN {S, D, B, C}

... and so on ...