



```
Enter Total Number Of Vertices In Graph
-> 9
Enter Total Number Of Edges In Graph
->13
```

```
Edge Number 1
Source Vertex :0
Destination Vertex :1
```

```
Edge Number 2
Source Vertex :0
Destination Vertex :2
```

```
Edge Number 3
Source Vertex :0
Destination Vertex :3
```

```
Edge Number 4
Source Vertex :1
Destination Vertex :3
```

```
Edge Number 5
Source Vertex :2
Destination Vertex :4
```

```
Edge Number 6
Source Vertex :3
Destination Vertex :5
```

```
Edge Number 7
Source Vertex :3
Destination Vertex :6
```

```
Edge Number 8
Source Vertex :4
Destination Vertex :5
```

```
Edge Number 9
Source Vertex :4
Destination Vertex :7
```

```
Edge Number 10
Source Vertex :5
Destination Vertex :2
```

```
Edge Number 11
Source Vertex :6
```

```
Source Vertex :2
Destination Vertex :4

Edge Number 6
Source Vertex :3
Destination Vertex :5

Edge Number 7
Source Vertex :3
Destination Vertex :6

Edge Number 8
Source Vertex :4
Destination Vertex :5

Edge Number 9
Source Vertex :4
Destination Vertex :7

Edge Number 10
Source Vertex :5
Destination Vertex :2

Edge Number 11
Source Vertex :6
Destination Vertex :5

Edge Number 12
Source Vertex :7
Destination Vertex :5

Edge Number 13
Source Vertex :7
Destination Vertex :8

Adjacency List is As Follows
0->1,2,3
1->3
2->4
3->5,6
4->5,7
5->2
6->5
7->5,8
8->
Graph Searching.....
```

```
Enter Source Of The Graph
->0
1.Breadth First Search
2.Depth First Search
3.Both
4.Exit
->3

      Breadth First Search

Source :0

Queue :0
Selected Node :0
Intermediate Result is.....
Traversed Elements Are :0

Queue :1 2 3
Selected Node :1
Intermediate Result is.....
Traversed Elements Are :0,1

Queue :2 3
Selected Node :2
Intermediate Result is.....
Traversed Elements Are :0,1,2

Queue :3 4
Selected Node :3
Intermediate Result is.....
Traversed Elements Are :0,1,2,3

Queue :4 5 6
Selected Node :4
Intermediate Result is.....
Traversed Elements Are :0,1,2,3,4

Queue :5 6 7
Selected Node :5
Intermediate Result is.....
Traversed Elements Are :0,1,2,3,4,5
```

Queue :2 3  
Selected Node :2  
Intermediate Result is.....  
Traversed Elements Are :0,1,2

Queue :3 4  
Selected Node :3  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3

Queue :4 5 6  
Selected Node :4  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3,4

Queue :5 6 7  
Selected Node :5  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3,4,5

Queue :6 7  
Selected Node :6  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3,4,5,6

Queue :7  
Selected Node :7  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3,4,5,6,7

Queue :8  
Selected Node :8  
Intermediate Result is.....  
Traversed Elements Are :0,1,2,3,4,5,6,7,8

After BFS Traversal Result is  
0,1,2,3,4,5,6,7,8

### Depth First Search

Source :0  
Stack :0  
Selected Node :0  
Intermediate Result is.....  
Traversed Elements Are :0

Stack :3 2 1  
Selected Node :3  
Intermediate Result is.....  
Traversed Elements Are :0,3

Stack :6 5 2 1  
Selected Node :6  
Intermediate Result is.....  
Traversed Elements Are :0,3,6

Stack :5 2 1  
Selected Node :5  
Intermediate Result is.....  
Traversed Elements Are :0,3,6,5

Stack :2 1  
Selected Node :2  
Intermediate Result is.....  
Traversed Elements Are :0,3,6,5,2

Stack :4 1  
Selected Node :4  
Intermediate Result is.....  
Traversed Elements Are :0,3,6,5,2,4

Stack :7 1  
Selected Node :7  
Intermediate Result is.....  
Traversed Elements Are :0,3,6,5,2,4,7

Stack :8 1



```
Traversed Elements Are :0,3,6

Stack :5 2 1
Selected Node :5
Intermediate Result is.....
Traversed Elements Are :0,3,6,5

Stack :2 1
Selected Node :2
Intermediate Result is.....
Traversed Elements Are :0,3,6,5,2

Stack :4 1
Selected Node :4
Intermediate Result is.....
Traversed Elements Are :0,3,6,5,2,4

Stack :7 1
Selected Node :7
Intermediate Result is.....
Traversed Elements Are :0,3,6,5,2,4,7

Stack :8 1
Selected Node :8
Intermediate Result is.....
Traversed Elements Are :0,3,6,5,2,4,7,8

Stack :1
Selected Node :1
Intermediate Result is.....
Traversed Elements Are :0,3,6,5,2,4,7,8,1

After DFS Traversal Result is
0,3,6,5,2,4,7,8,1

1.Breadth First Search
2.Depth First Search
3.Both
4.Exit
->
```