In [1]:
```python
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from collections import defaultdict



class Graph:

    def __init__(self):
        self.graph = defaultdict(list)
        self.visited = []

    def addEdge(self, u, v):
        self.graph[u].append(v)

    def BFS(self, s):
        queue = []

        queue.append(s)
        self.visited.append(s)

        while queue:
            s = queue.pop(0)
            print(s, end=" ")


            for i in self.graph[s]:
                if i not in self.visited:
                    queue.append(i)
                    self.visited.append(i)



if __name__ == "__main__":

    g = Graph()
    g.addEdge(0, 1)
    g.addEdge(0, 2)
    g.addEdge(1, 2)
    g.addEdge(2, 0)
    g.addEdge(2, 3)
    g.addEdge(3, 3)

    print("Following is Breadth First Traversal (starting from vertex 2):")
    g.BFS(2)
```

```
Following is Breadth First Traversal (starting from vertex 2):
2 0 3 1
```

In [ ]: