* Implementation of Undirected Connectivity

- The approach for this problem is also the same as BFS, the only change whenever we reach the end of one part we will select a different leader node and iterate through that node.

- General Algorithm

```
BFS (G, S)
Mark S as 'explored'
Q ← queue initialised by S.
while Q ≠ ∅
   remove from front of Q the vertex 'v'
   for each edge (v, w)
   if w is unexplored
      mark w as explored
      Add w to Q
for i to n
   if is unexplored
      BFS(G, i)  source
```

- Complexity Analysis

We are using two arrays which are both traversed only once. Hence the program will run in linear time.

$$O(m+n)$$