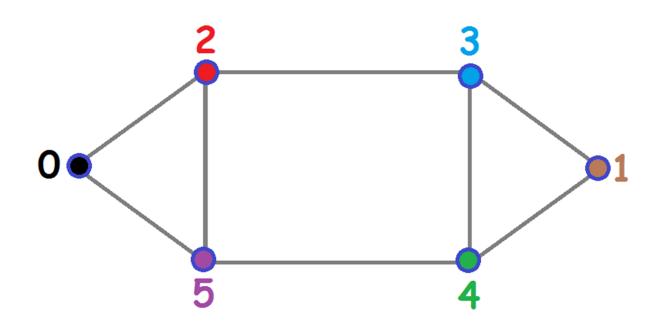
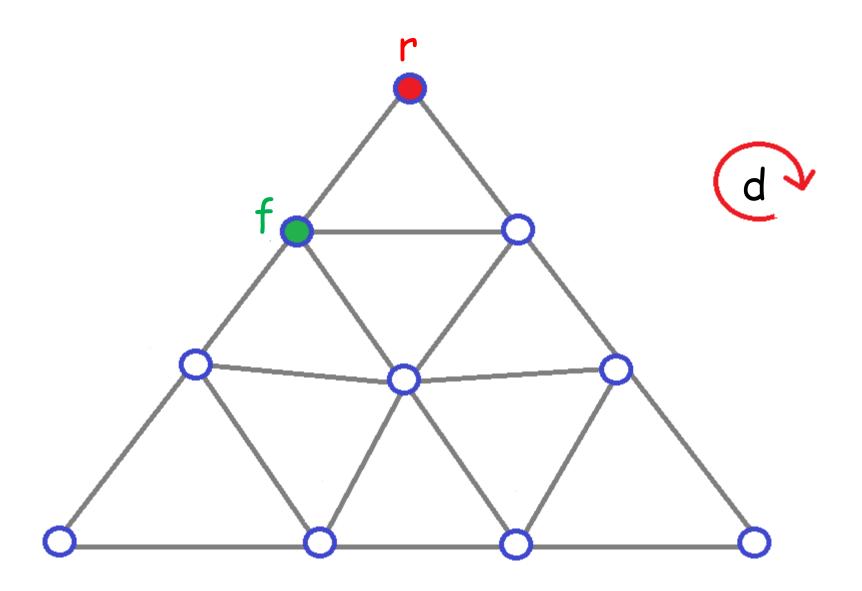
Give the parent, queue, BFI (breadth first index), and level arrays when BFS is applied to this graph starting at vertex 0. Process the neighbours of each vertex in numerical order.

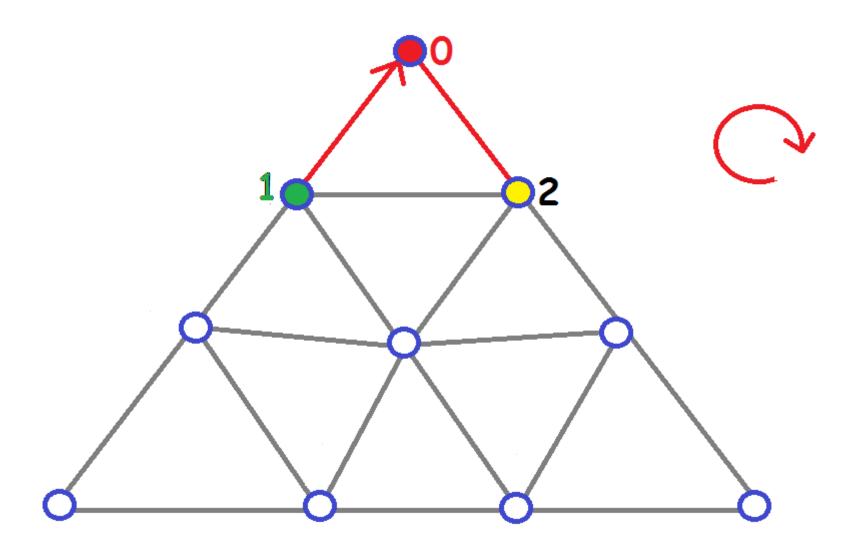


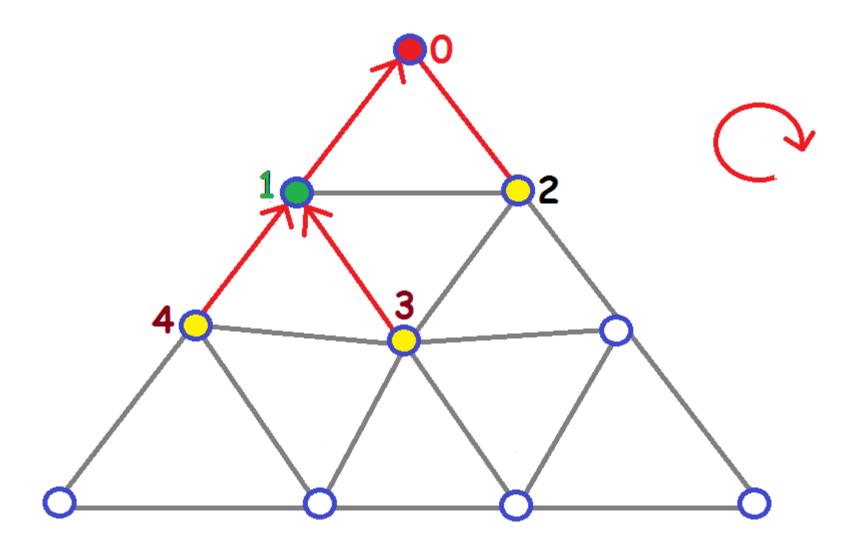
Clockwise_BFS(r, f, d):

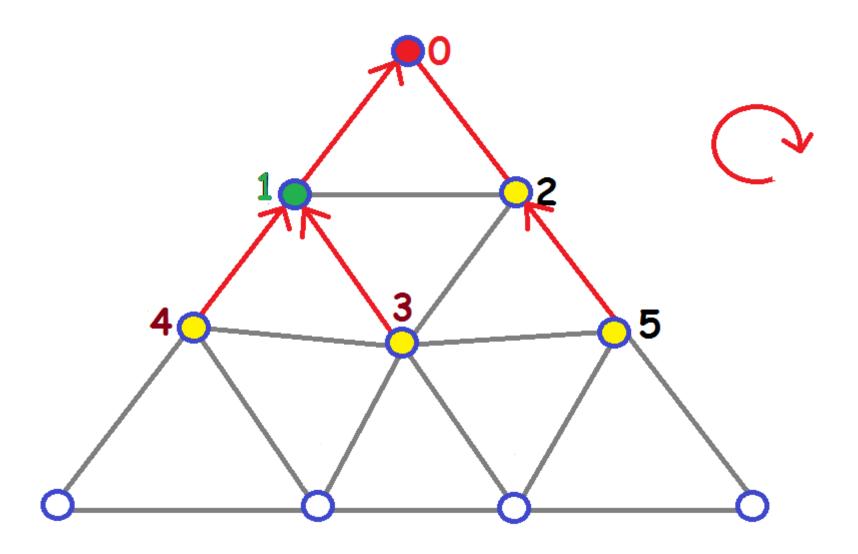
- 1. Choose a root vertex r.
- 2. Choose a first child vertex f.
- 3. Choose a direction d (clockwise or counterclockwise)
- 4. Do BFS subject to:

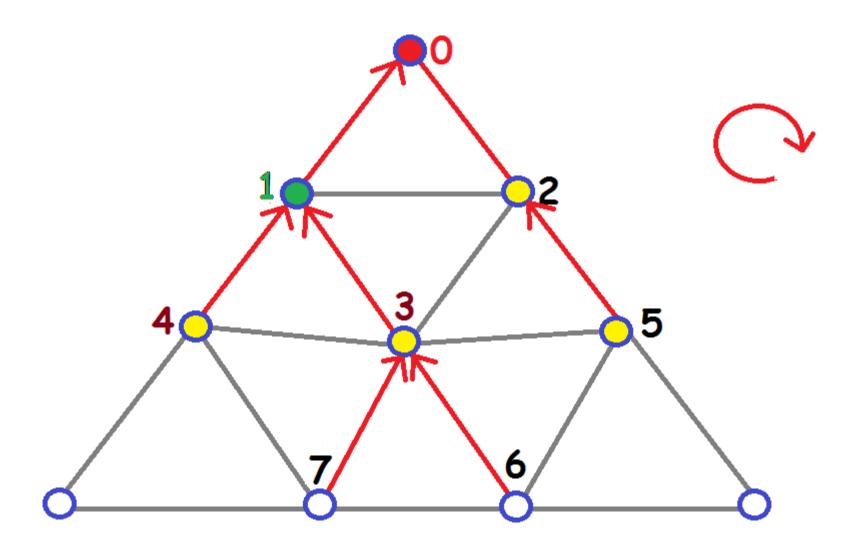
The children of each vertex are visited starting with f for the root or otherwise, starting with the BFS parent. If the direction is cw apply it to the original graph. Otherwise flip the graph and use the clockwise direction.

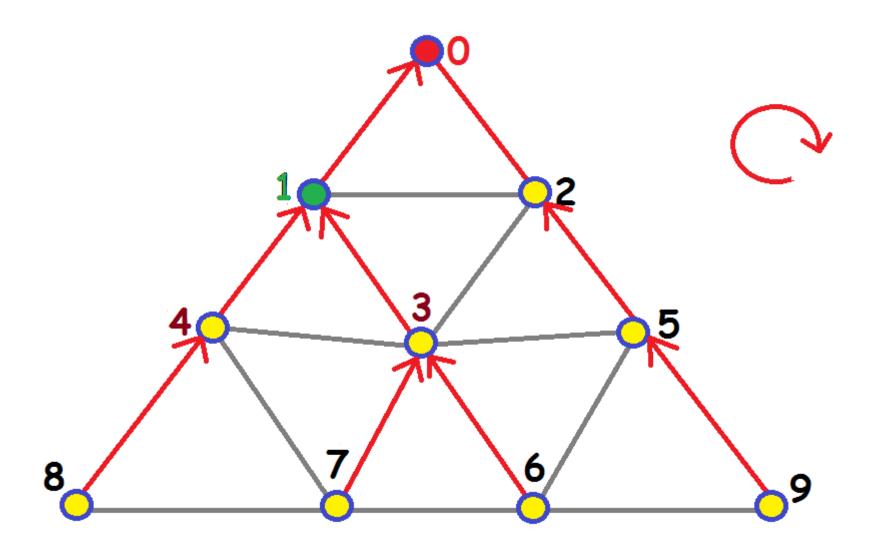


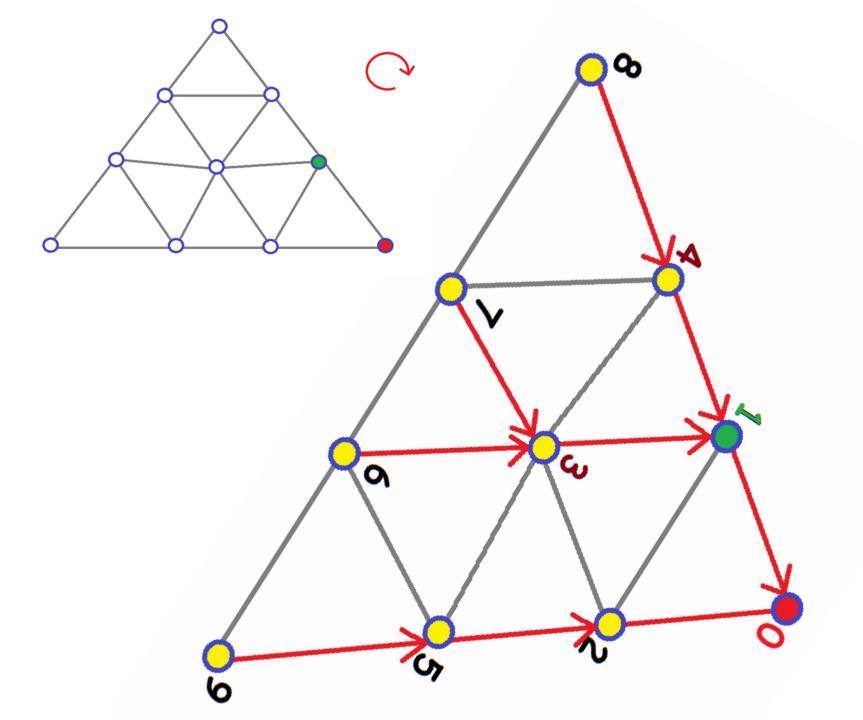




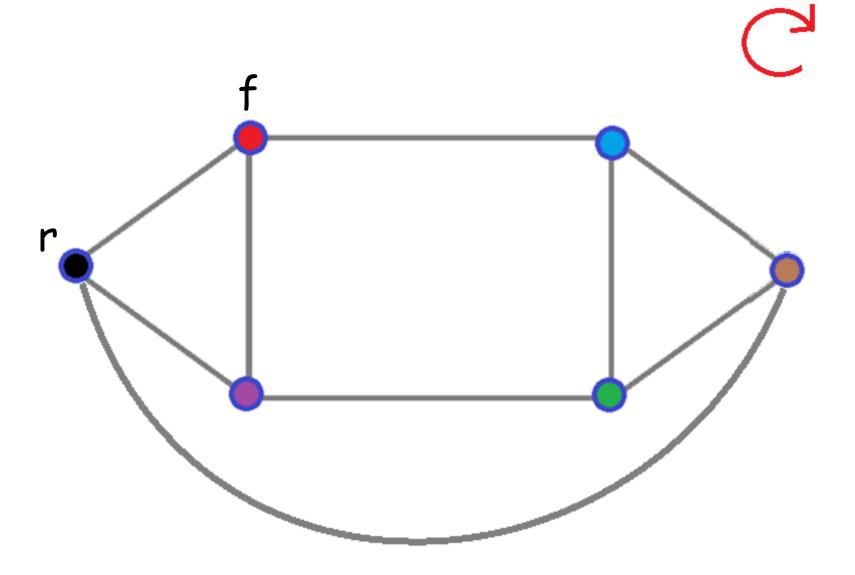




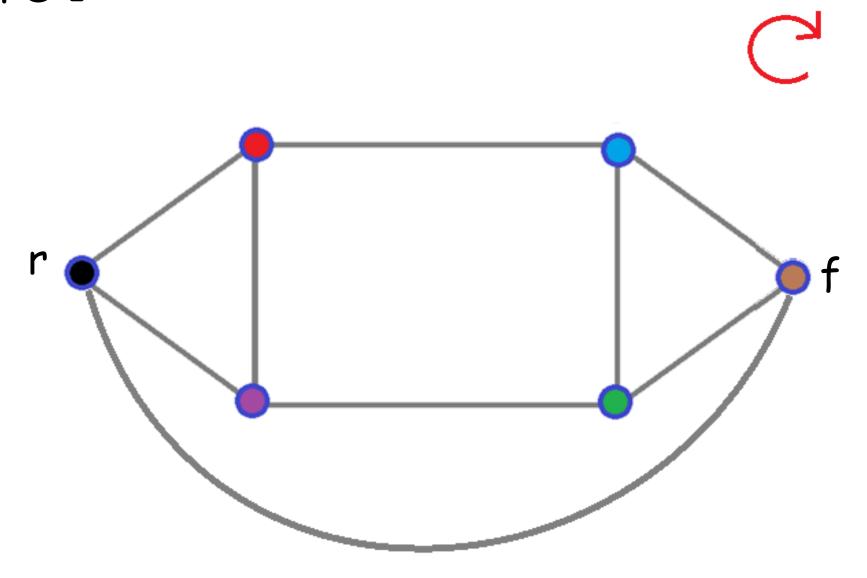




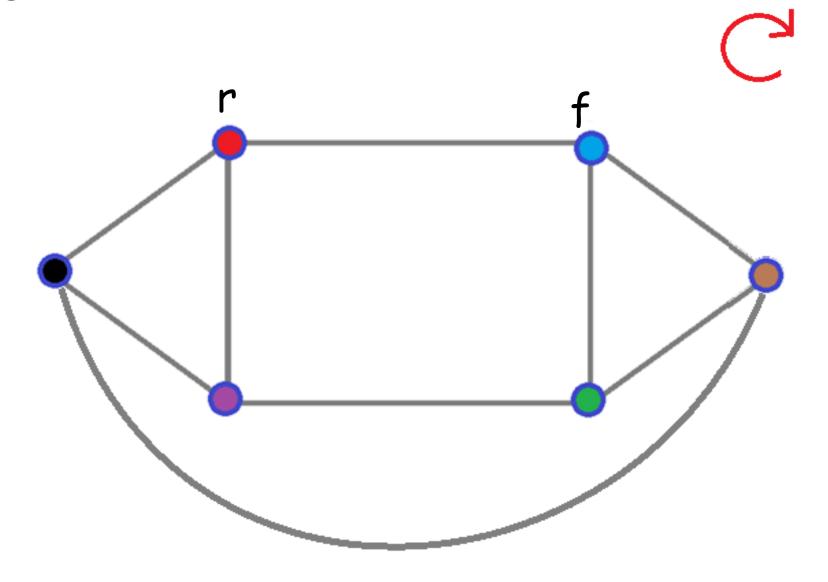
BFS 0:



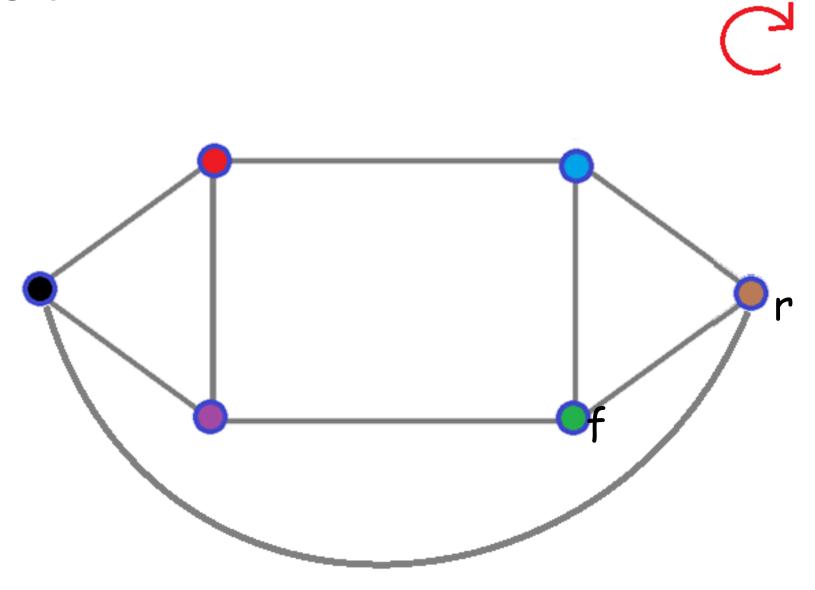
BFS 1:



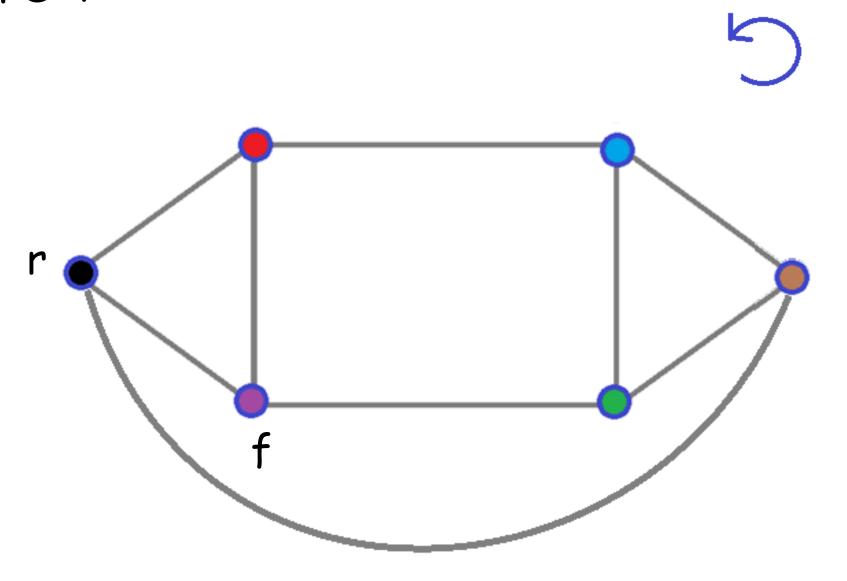
BFS 2:



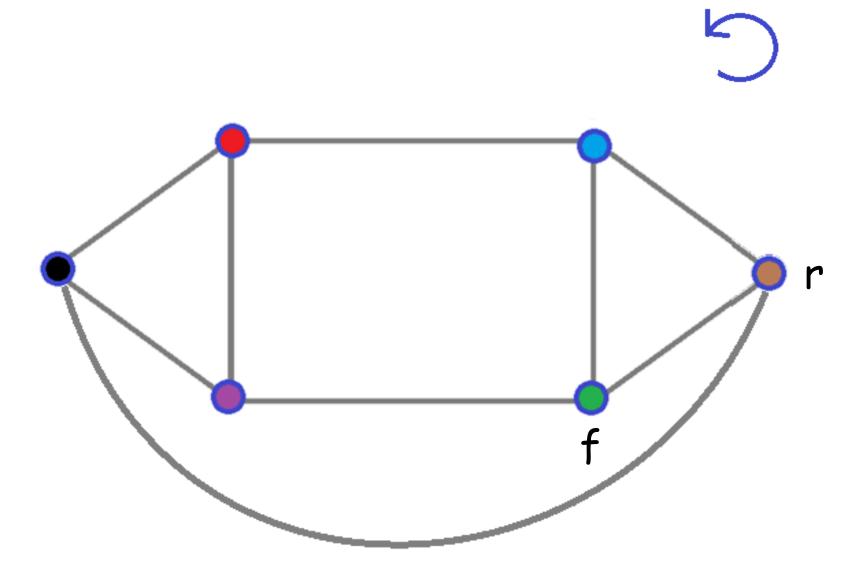
BFS 3:



BFS 4:



BFS 5:



BFS 6:

