④ For $O(N+M)$ Algorithm, the time complexity would be. $O(N \log N)$.

If the number of titles in each road is exactly '1', that means we don't need to keep track the number of titles for an individual road. So, we don't need to use any priority queue. we can only use ~~priority~~ BFS Algorithm to find the sortest path. If we use BFS, the time complexity would be $O(N+M)$.

Pseudo code:

```
BFS:
visited = [0] * nodes
queue = []
```

P.T.O.

```
BFS (visited, graph, node, destenition) {
    DO visited [int(node-1)]
    DO queue —append node.
while queue is not empty:
    u = queue.pop(0).
    print (m)
    if m == destinition:
        break.
for each vetctex of v in graph:
    if visited [int(v)-1] == 0:
        DO visited (int(v)-1)
        DO queue.append(v).

BFS (visted, graph, source, destinetom)
```