

For Question 2.2

Use this

<https://www.geeksforgeeks.org/find-paths-given-source-destination/>

To find all possible paths from a vertex to every other vertex.

It will Take $O(V^V)$ time.

Repeat it for all possible vertices.

SO total time complexity is $O((V^V)*V)$. (Quite high)

Now check if the path is valid and if yes calculate its cost.

Then sort the paths lexicographically and print top k shortest paths.

Sorting will take its own time which is also high as the number of paths is high.