Terminology clarification:

1. Leaf:
2. Long leaf

First approach:

Algorithm:

1. Run shortest path algorithm from Soda Hall to every vertex representing a TA’s home. Meanwhile record how many times a vertex is included on a valid a shortest path, call this h.
2. Then start again from soda hall. Each time go down the unvisited, incident vertex with the highest h, until we drop off all the TAs.
3. Drop-off strategy: When we encounter a leaf (leaf here is on a graph but defined in the same sense as that on a tree) or a long leaf (a long leaf is )
4. After dropping off all the TAs, run shortest path algorithm from the current vertex back to soda, and return along that path.

Reasoning: