2.

There is a compilation error for '!=' binary operator used in the find algorithm as it is not defined for the class URL. The class URL is defined by the user and needs operators defined by the user while string library hasa not equal binary operator defined.

3b.

Following the restrictions of part a, using the one parameter listAll is not possible since there would be no way to track the path without adding a container or global or static variable.

4a.

O(N3)

3 embedded for loops

for loop embedded within for loop embedded within another for loop

4b.

O(N3)

still 3 embedded for loops

for loop embedded within for loop embedded within another for loop even though it has a smaller constant of proportionality.

5a.

get function is called N times which in turn has N operations so complexity of uniqueIntersect O(N2)

5b.

N log N of sort is the most signifcant term of uniqueIntersect giving it a complexity of O(N log N)