WRITEUP

The test I did for the assignment is nothing. Since I spend all three late days for assignment 2 and felt so sick last week because of lake of sleep. I don't have time for writing test case.

Q1:
A: the difference is if I fully resolving the name, it will be hard to rename the name of the reference name and it will take longer time to fully resoling the name. Also, the name we spend a lot of time to resolved might not be use soon.

Q2:
A: System design is an very important skills in the assignment. Because, system design can use abstraction, laying, hierarchy and modularity to reduce the complicity of the programing.

Abstraction: abstraction can help use visualization to break the whole system into many small functions base on the functionality of each part and what it does. For example, we abstract the hash table into 8000 buckets. So, we can use 128 * index + 10 to represent the position of a specific bucket.

Laying: laying means separate the whole system into different lays, the user in the higher level shouldn't access the function in the lower level. So, a layer of the system is built on another system. For example, assignment 3 is built on assignment 2, we use the worked version of the HTTP server with multithread as an basic layer and adding the additional alias function on it. So, we don't have to worry the multithread doesn't work(if we have worked version of assignment 2).

Hierarchy: Hierarchy means the user have lower authority can't access the date request higher authority. For example, the function outside the scope can't access the variable inside in scope. In this experiment, I crate an independent buffer for GET request, so as long as we only use the buffer, we shouldn't worry about buffer overflow.

Modularity: modularity is very popular in the system design, which means we can write a piece of code we reuse many times into an independent function. So, we can call the function as much as we want. Another advantage of it was, if we want to modified the code, we only need to modified in one place so all the code would be updated.