

Homework 9:

Greedy Algorithm:

1) State one example of Greedy algorithm other than that studied in class. Explain the algorithm in brief.

Homework 10:

Dynamic Programming:

Dynamic Programming is mainly an optimization over plain recursion. Wherever we see a recursive solution that has repeated calls for same inputs, we can optimize it using Dynamic Programming. The idea is to simply store the results of subproblems, so that we do not have to re-compute them when needed later. This simple optimization reduces time complexities from exponential to polynomial.

Explain Dynamic Programming with one example other than the one studied in class.

Homework 11:

Concurrency:

Explain the following briefly with the help of an example:

- a) Race around condition
- b) Critical Section
- c) Mutual Exclusion