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① Simulated Annealing and evolutionary algorithm both can be performed to get good enough individual. Simulated Annealing is good when good scheduler function can be formed. But it has domain of toughness of ~~make~~ forming good scheduler function or mapping. Simulated Annealing can be applied to a variety of problems involving ~~re~~ annealing, metal melting etc. However, if cost function graph is such that it has too much curveness all over the period (i.e. keeping up-down all the time), simulated annealing may not perform good.

In case of evolutionary algorithm, its merit is it is practically alike to human/species crossover and mutation. In this field of genetics, it can be widely ~~o~~ used. However, empirical study regarding evolutionary algorithms has not been done too much. And it is usually applicable to a small set of problems. Repeated-restart hill climbing may outperform it in most of the searching problems,

or it is tough to prove the opposite.

(2) In a constraint satisfactory problem, variables should be letters as much as we can (or we should keep them short if we use word). Because, in an usual csp problem, there are many constraints, domain writing and formulations so, using big bulky words may make it cumbersome. To keep it, more readable and easy formulating, we should use letters. If multiple letters are used for same variable, we should keep them as little as possible, yet meaningful.

(3) If there are n cities,

Variables will be $X_1, X_2, X_3, \ldots, X_n$.

For each variable,

domain will be the set of cities. If cities are Dhaka, Chittagong, Rajshahi,

$D_i = \{$ Dhaka, Chittagong, Rajshahi $\}$ for each i from 1 to n.

Constraints:-

1. All diff $(X_1, X_2, X_3, \ldots\ldots, X_n)$. That is all variables will be assigned distinct value).

2. For each $i = 1$ to $n-1$, assigned cities of there is a road between X_i and X_{i+1}