① Algo. for AI - (Module 7)

AI refers to simulation of human intelligence to machines. Goal of AI includes learning, reasoning & perception.

In normal Algo., our goal is to get the (desired) output. But main goal of Algo. in AI is to help agents to decide itself, through learning, reasoning & perception.

There are two types of inferences:

inductive - start with observation and expand into a general conclusion

deductive - deduce from the arguments leads to conclusion.

Two types of search Algorithms in AI.

* Uninformed search / Blind Search
* Informed search (or Heuristic Algo.).
  Four types: ① Best-first search ② Greedy best-first search ③ A* search
  ④ memory bonded heuristic search

Informed search	Uninformed search
1. It uses knowledge for searching process	It does not use
2. It finds solution more quickly (consumes less time)	It finds solution slower as compared to informed search
3. It may or maynot be complete.	It is always complete
4. cost is low.	cost is high
5. It provides the direction regarding the solution.	No suggestion is given regarding the solution
6. Greedy search, A* search, Graph search	DFS, BFS, Uniform cost search, etc.
7. It is less lengthy in implementation	It is more lengthy while implementation