**Assignment-I**

**MSCS-3 & MSSE-3**

Q: What is the complexity (in space and in time) of the following search methods:  
■ depth-first search  
■ breadth-first search  
■ best-first search  
■ greedy search

Q: Explain the differences and similarities between depth-first search and breadth-first search. Give examples of the kinds of problems where each would be appropriate.

Q: Provide a definition of the word “heuristic.” In what ways can heuristics be useful in search? Name three ways in which you use heuristics in your everyday life.