# Design and Analysis of Algorithms CMPS 323-SPRING 2017 Homework-9 Deadline June 01, 2017 5 Points

#### **Research Work**

This homework consists of searching about the advanced algorithms non-discussed in the classroom. You should introduce the selected algorithm and explain it in your own words, give the pseudo code, implement the algorithm, and give examples about the outcomes and the running time of the algorithm.

#### **Methodology:**

- 1- Make a search on the Internet and the University Library.
- 2- Read about the algorithm from different sources.
- 3- Understand it and give simple example for the reader.
- 4- Show the outcome of your implements with the code and screen snapshot.

## Report:

You should write a report of 4-10 pages about your work. You should discuss the importance and application of the selected algorithm.

## **References:**

You should give the list of references that you consulted during your study.

## **Proposed algorithmd:**

You can select one or more algorithms from the following list: Branch and Bound backtracking, Genetic Algorithms, Graph Coloring algorithms, Tabu search algorithm, Spanning Tree algorithm, Ants colony algorithm, Bees algorithm, Simulated Annealing algorithm.