CSCI 281, Assignment 09 – Graphs(25 points)

- 1. Suppose there are 20 students are in a room.
 - (a) (5 points) If each student shakes hands exactly once, how many handshakes are there? Model this by drawing a graph.
 - (b) (5 points) If each student shakes hands with every other student, how many handshakes are there? Model this by drawing a graph
- 2. Consider the graphs C_3 , C_4 , C_5 , and C_6 .
 - (a) (5 points) Draw each of these graphs.
 - (b) (5 points) Which of these graphs are bipartite?
 - (c) (5 points) Draw the bipartite graphs so that the two partite sets are clear.