

# PROLOGUE

## FOR ALL ASSIGNMENTS

- Attach a *prologue* for all assignments.
- Use sample *prologue* sheet in the course material, customize it for every assignment.
- *Prologue* makes it easy to separate assignments for grading purpose.

# **EXERCISE 9**

## **AFTER CHAPTER – 21**

### **PROBLEM**

Implement a queue data structure using an array. Read the choice and data input from a file. Perform Enqueue or Dequeue operations depending on the choice of the input preceding the data element. Print what is being inserted and what data is removed from the queue. When the choice is to perform Enqueue, you will read the choice and data. But when the choice is to perform Dequeue, there is no data to be read.

Enqueue choice: E,    Dequeue choice: D

Input:

Choice: E    E    E    E    E    D    D    D    E    E    D

Data:    25    37    45    52    98                    36    12

Choice: D    E

Data:            69

You need to use array of structures for the implementation.  
Read until the end of the file.

### **DELIVERABLES**

Write the prolog and fill up all information for this exercise as given in the sample. Submit the source code, input and the output. The program is expected to be well commented. Place your program as soft copy on assigned shared drive for students of this course.

### **DUE DATES**

Assignments are due on the following week after completing the chapter discussion.