



Course Information
Department of Computer Science and Engineering
Semester: Spring 2014
List of Programming Projects (DS)

1. Write a program for spell checker. Spell checking is the process of verifying that a particular word is spelled properly according to some dictionary. Spell checkers are used in many applications, including word processors (such as Microsoft Word), electronic dictionaries, and optical character recognition (OCR) systems that need to turn images of printed text (or even handwriting) into coherent text.

Your task is to implement a spell checker that determines if a given word is spelled correctly based on a dictionary lookup.

2. Write a program for Phone Book using a suitable data structure. The phone book display detail phone information like your favorite cell phone.
3. Write a program for a Dish Washer machine using a suitable data structure. In the dish washer, you need to arrange plates one after another and you may use some dish for serving food from the washer. Any point in time, some or all places are available for cleaning dishes in the machine. You may have set the capacity of the dish washer and each dish cleaning time at the beginning of the program. Your program will display at any point in time, how many dishes are cleaned for the day, how much time was utilized in cleaning and how many dishes still may be cleaned.
4. Write a program to simulate a Train Station. Suppose Kamrup Railways have decided to automate the process of platform allocation. The menu based system performs the following operations:
 - a. *When a train arrives, the system allocates a platform from available platforms on inputting train number.*
 - b. *When a train leaves, the system de-allocates the particular platform on inputting the train number*
 - c. *The system also displays the summary of occupied and free platforms at any point of time.*
5. Write a program to simulate a Polling Center for vote casting. The polling center will have number of lines for the voters to wait for the voting and inside the center, there will be same number of ballot boxes with same number of returning officer. The voter enter the polling center and give his or her vote and leave the polling center. Your program will display how many voters already completed vote casting in how many lines and number of voters still waiting in the line.
6. Write a program to create a distance map with historic places between Dhaka, Sylhet, Khulna, Chittagong and Cumilla. Your program will display distance between cities along with visiting places or places of attractions.
7. Write a program to manage Food order in a restaurant. In a restaurant, the food order contains food number, size, and quantity. The order is served in the form of first come first serve basis. Your program will display total number of orders received, served and waiting at any point in time.