

Write a program using link list to manage an Employee database. Each entry in the data file includes three fields: Employee Name, Employee Age, and Employee Salary. Data is semicolon delimited in the file. Your program should read data from the file into a link list in a sorted order by employee name. Your program must be able to open a data file when its name is passed as a **command line argument**. When user adds an employee record, make sure that data goes into a link list in a sorted order. When “**List All Employees**” is selected by the user it should display the employee data in a sorted order by employee name and formatted according the table in figure 1. When user selects “**Exit Employee Database**”, write all the data, if need, from the link list to a file and terminate the program gracefully. Display the following menu one the screen after reading the data file into a link list:

Menu Options:

1. Add Employee
2. Delete Employee
3. Search Employee
4. List All Employees
5. Save Employee Database
6. Exit Employee Database

Enter Your Choice:

### **Input File Data for Project #3**

Use any text editor to enter following data into a file.

```
Patrick Stroud;48;140565
Ursula Spencer;27;36450
Clifton Stillman;65;99900
William Reynolds;37;77550
Dean Niles;53;120000
John Kaufman;53;69597
Paul Kane;51;169650
Paul Goldsmith;60;200000
Larry Godwin;45;59500
Kurt Lamm;39;90000
Susan Carlton;42;85000
Cameron Wu;29;50589
```

## Output for Project #3

Figure 1

#	Employee Name	Age	Salary
=====			
1.	Cameron Wu	29	50,589
2.	Clifton Stillman	65	99,900
3.	Dean Niles	53	120,000
4.	John Kaufman	53	69,597
5.	Kurt Lamm	39	90,000
6.	Larry Godwin	45	59,500
7.	Patrick Stroud	48	140,565
8.	Paul Goldsmith	60	200,000
9.	Paul Kane	51	169,650
10.	Susan Carlton	42	85,000
11.	Ursula Spencer	27	36,450
12.	William Reynolds	37	77,550

### Project #3 Grading Policy

<i>Category</i>	<i>Points Possible</i>	<i>Points Received</i>
Correctness and Efficiency	10	
Meaningful variable names.	10	
Usage of <b>comma in a salary field</b>	10	
Use of <b>enum</b> type.	10	
Command line argument for input file	10	
Deleting an Employee	10	
Adding an Employee in a sorted order while reading a file.	10	
Saving Link List data to a file.	10	
Complete Documentation	10	
User-friendliness and Code Readability	10	
Total	100	

### Things to Remember

- Late program turn-in will have 10% penalty per week.
- Use comma in the salary field if salary is greater than 999.99.
- Make sure that you do appropriate error checking. (User-friendliness)
- Do not turn in incomplete or crashing program.
- Use data file that is provided for this assignment.