NATIONAL TEXTILE UNIVERSITY

Department of Computer Science
Lab # 13: Programming Fundamentals (COC-1071)

Basic Information			
Registration#		**Name**	
Total Marks		**Marks Obtained**	
Tools:	Dev-C++ 5.4.1		
Objectives	1. Class and Objects 2. Constructors	3. Destructors 4. Reading a file	
Note	Solve the following problems using the concepts we have covered so far		

1. **(Car Class)** Make a car class (Car) where each instance has the following properties: Brand, model (year), number of traveled miles and color. Write default constructor and display function for class.
2. (**House Class**) A real estate broker wants to create a program for managing houses yet to be sold. Create a house class and decide on your own (at least five properties). Write 2 constructors default, argument and display function.
3. Create a pointer of house class and dynamically allocate memory to it and access its set operator
4. **Create a class of employee with following specifications:**

Private Variables	Public Functions
EmployeeID: Integer **First Name**: Character Array **Last Name:** Character Array **Designation:** Character Array **PhoneNumber:**	**Default Constructor:** Sets the value of EmployeeID to zero **Argument Constructor:** Takes argument values for all private **Set Function:** Take values from main and assign these values to the private variables **Show Function:** Show the values of the private variables : **GetName Function:** Return the first name **GetID:** Return the ID

In main create an array of ten objects. Set their values and display them on screen. Implement a search function, which takes the array of objects as argument and displays the record of the employee whose name is entered by the user.

File Processing: Reading a File (Input)

5. Create a text file and enter your complete name on it and then read this file and display it on console
6. Save your text file anywhere on computer and display it on screen
7. Display your source (code) file on the screen
8. Save your complete source file in an array in your program. And then display it in reverse order.
9. Create a file of Notepad and read it two times and display it. Observe it why it cannot be displayed two time on console. Use seekg(ios::beg) function.
10. Creates two text files enter following line on the first the file: **Is it a world to hide virtues in? (Shakespeare).** On the second file write: **Don't be consistent, but be simply true (Oliver).** Read both files and display them on screen.
11. Write Following data on a text file which shows First Name, Last Name, Phone and Email. Read this data in separate variables and display them on console. Use string object i.e. **string a** in spite of **char a[10];**

Maqbool	Ahmad	0300111111111	**m@gmail.com**
Mansoor	Anwar	0344222222222	**a@hotmail.com**
Faraz	Rashid	0345333333333	**f@gmail.com**
Shehraz	Ali	034444444444	s@hotmail.com

12. Write a search function for the Q11 which input first name from user and only show the record of the person.
13. Save Question 5,6 and 7 on a Notepad file and search how many times word file is appeared in this file.
14. Count articles (a and the) from the Q7
15. Only display all records of Q11 file whose first name start with "M"