

DAY 15 : Assignment

By
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Assignment 1

Write a C# code with at least 10 methods in file operations.

Answer :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

namespace _10methods_file_ops
{
    internal class Program
    {
        static void Main(string[] args)
        {
            //Assigning a file path-----
            string filePath = @"C:\Users\vihar\Desktop\random\random.txt";

            //Creating a file-----
            StreamWriter sw = File.CreateText(filePath);
            sw.WriteLine("Hi, This is Vihar");
            sw.WriteLine("\nRandom Text !! (using WriteLine)");
            sw.Write("\nAnother random text !! (using Write)");
            sw.Write("\nContinued.....");
            sw.Close();

            //Appending a text-----
            sw = File.AppendText(filePath);
            sw.Write("\nAppending");
            sw.Write("\nrandom");
        }
    }
}
```

```

sw.Write("\ntext message");
Console.WriteLine("\n File is appended");
sw.Close();

//Reading a file-----
StreamReader sr = File.OpenText(filePath);
string x;
Console.WriteLine("\n File reading");
while((x = sr.ReadLine()) != null)
{
    Console.WriteLine(x);
}
sr.Close();

string fileNewPath = @"C:\Assignments_NH_Vihar\Day 15\random.txt";
//Moving a file-----
if (File.Exists(fileNewPath))
{
    File.Delete(fileNewPath);
}
Console.WriteLine("\n deleting old path of text file...");
File.Move(filePath, fileNewPath);
Console.WriteLine("\n File path moved !");

//Copying a text file-----
File.Copy(fileNewPath, filePath);
Console.WriteLine("\n File copied !");

//Opening a text file-----
File.OpenText(filePath).Close();
Console.WriteLine("\n File opened without errors");

string appendText = "\n adding AppendAllText method";
File.AppendAllText(filePath, appendText, Encoding.UTF8);

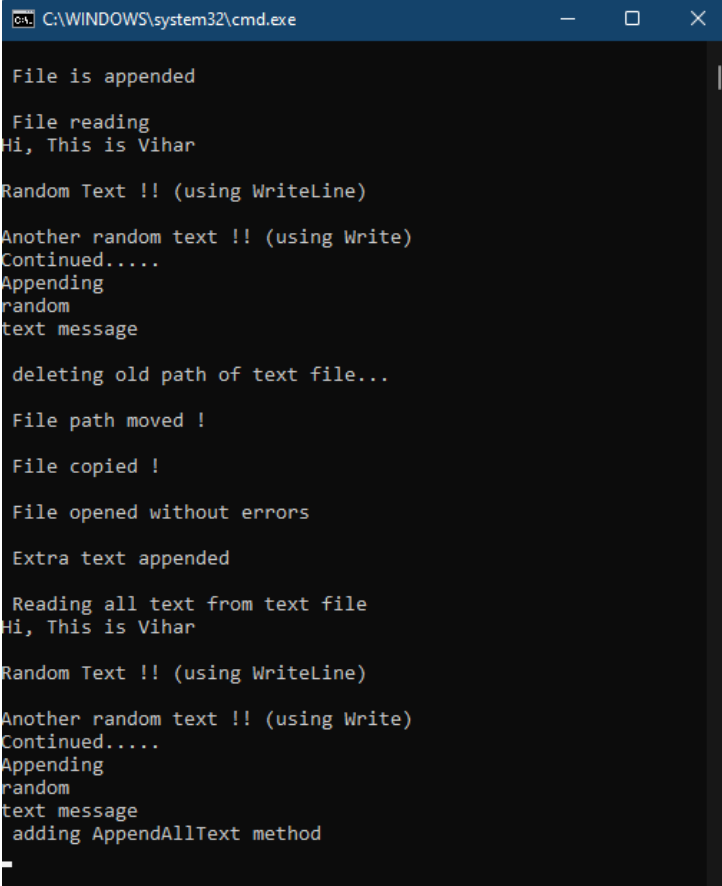
Console.WriteLine("\n Extra text appended");
string readText = File.ReadAllText(filePath);

Console.WriteLine("\n Reading all text from text file");
Console.WriteLine(readText);

```

```
Console.ReadLine();  
  
    }  
}  
}
```

Output :



A screenshot of a Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe". The window has a dark blue title bar with standard minimize, maximize, and close buttons. The command prompt itself has a black background with white text. The output of the program is as follows:

```
File is appended  
  
File reading  
Hi, This is Vihar  
  
Random Text !! (using WriteLine)  
Another random text !! (using Write)  
Continued.....  
Appending  
random  
text message  
  
deleting old path of text file...  
  
File path moved !  
  
File copied !  
  
File opened without errors  
  
Extra text appended  
  
Reading all text from text file  
Hi, This is Vihar  
  
Random Text !! (using WriteLine)  
Another random text !! (using Write)  
Continued.....  
Appending  
random  
text message  
adding AppendAllText method
```

Assignment 2

Write a C# code to copy from one folder to another by scheduling the job using Task Scheduler.

Answer :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

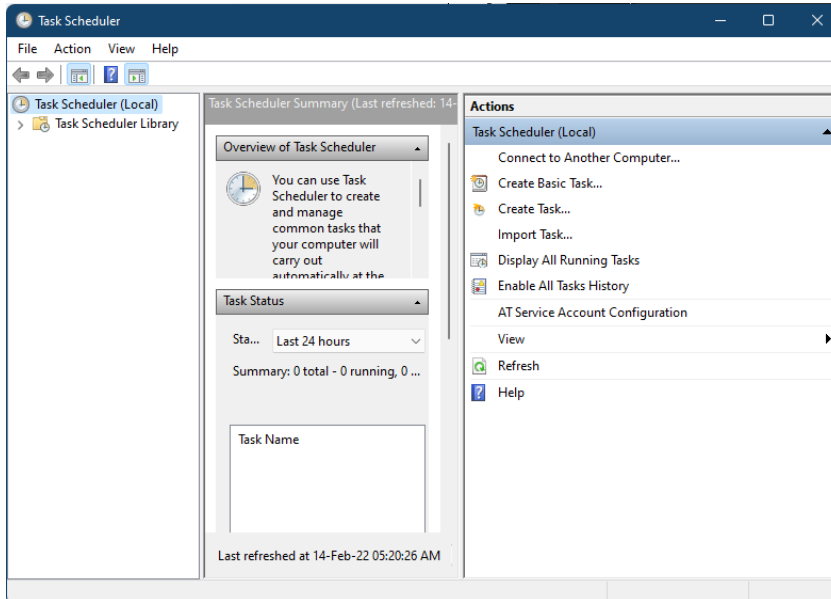
namespace copy_task_scheduler
{
    internal class Program
    {
        static void Main(string[] args)
        {
            string filePath = @"C:\Assignments_NH_Vihar\Day 15\random.txt";

            string TaskSchedulerPath = @"C:\Assignments_NH_Vihar\Day 15\copy_folder\random.txt";
            if (File.Exists(TaskSchedulerPath))
            {
                File.Delete(TaskSchedulerPath);
            }
            File.Copy(filePath, TaskSchedulerPath);
            Console.WriteLine("\n File copied.!");
            Console.ReadKey();
        }
    }
}
```

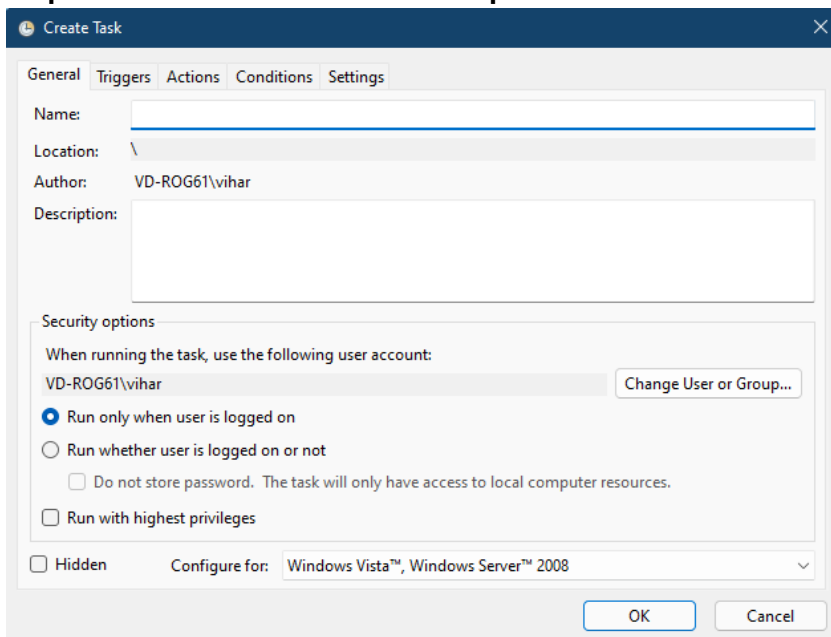
Output :

Step 1 : Open Task Scheduler from start.

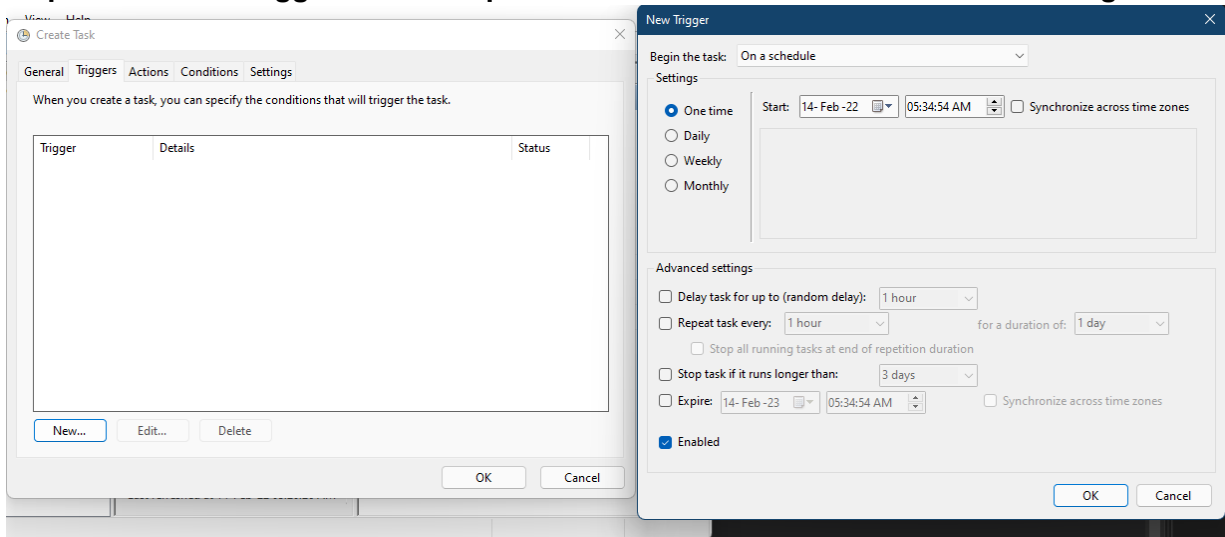
Step 2 : click on “ Create Task ”



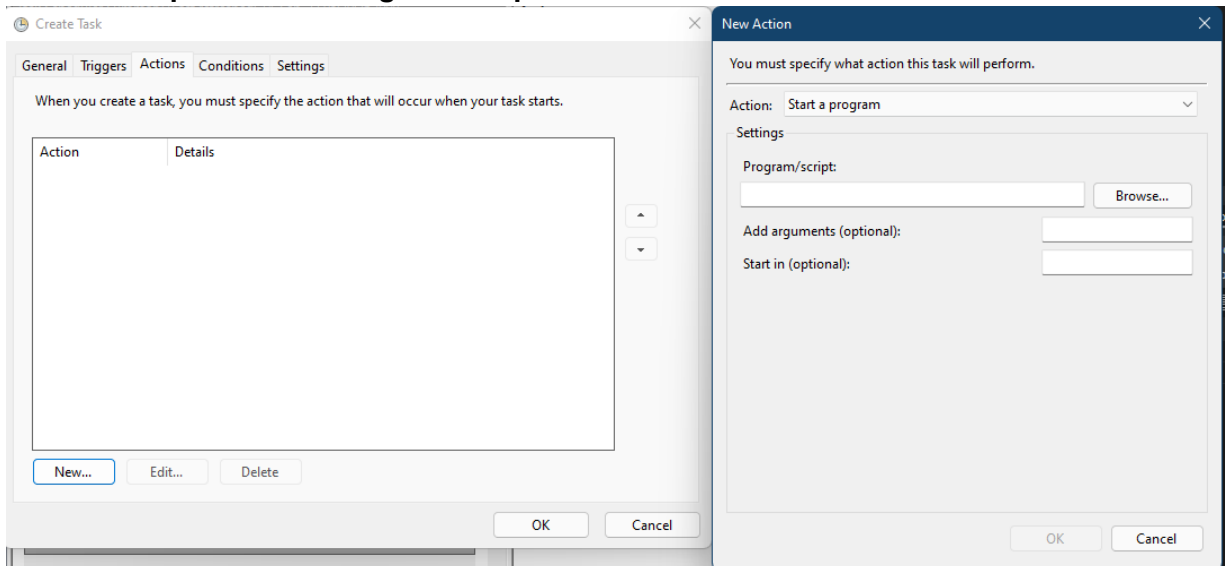
Step 3 : Enter the Name and Description



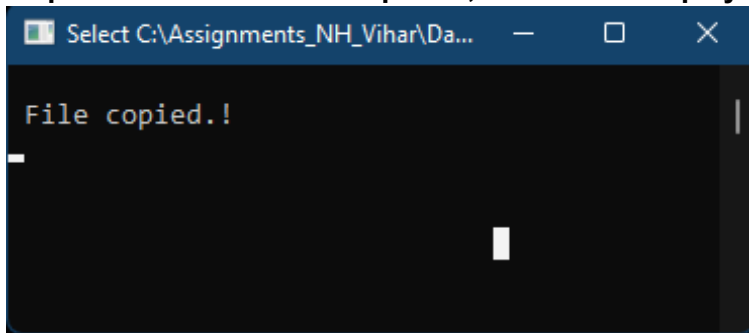
Step 4 : Click on Triggers tab on top of the window to customize the task settings



Step 5 : Click on the Actions tab and click on new to create the action. Copy and paste the .exe file path under Program/Script to run the scheduler.



Step 6 : Once a task is completed, here is the displayed output.



Assignment 3

Write a C# code to write data into a file (append the data using StreamWriter class).

Answer :

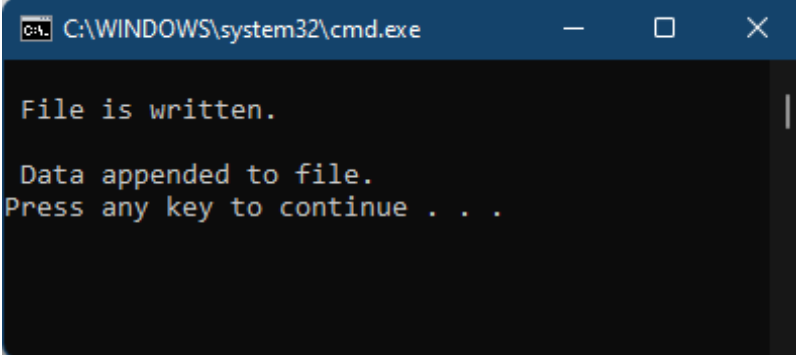
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

namespace write_data_streamwriter
{
    internal class Program
    {
        static void Main(string[] args)
        {
            //Creating a file using StreamWriter class
            StreamWriter sw = new StreamWriter(@"C:\Assignments_NH_Vihar\Day
15\streamwriter_ex.txt");
            sw.WriteLine("Hi this is VD");
            sw.WriteLine("\n Bunch of random text.");
            sw.Close();

            Console.WriteLine("\n File is written.");
            StreamWriter sw1 = new StreamWriter(@"C:\Assignments_NH_Vihar\Day
15\streamwriter_ex.txt", true);
            sw1.WriteLine("\n New object of StreamWriter class");
            sw1.WriteLine("\n More and more bunch of random text.");
            sw1.Close();

            Console.WriteLine("\n Data appended to file.");
            Console.ReadKey();
        }
    }
}
```

Output :



A screenshot of a Windows command prompt window. The title bar at the top is blue and contains the text "C:\WINDOWS\system32\cmd.exe" along with standard window control buttons (minimize, maximize, close). The main area of the window is black with white text. The text displayed is: "File is written.", "Data appended to file.", and "Press any key to continue . . .". A vertical scrollbar is visible on the right side of the command prompt window.

```
C:\WINDOWS\system32\cmd.exe  
  
File is written.  
  
Data appended to file.  
Press any key to continue . . .
```


Assignment 4

Write a C# code to read data from a file using file operations.

Answer :

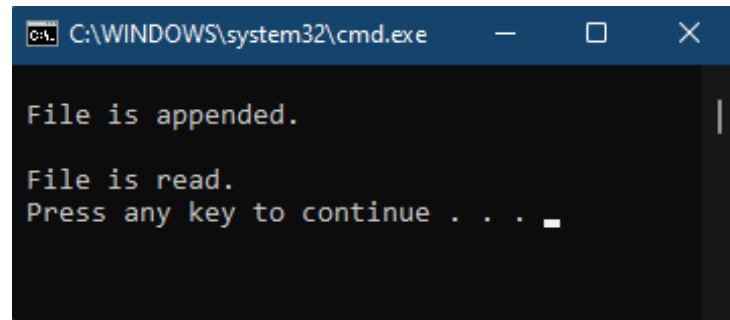
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

namespace read_data_file_ops
{
    internal class Program
    {
        static void Main(string[] args)
        {
            //Creating a file
            StreamWriter sw = new StreamWriter(@"C:\Assignments_NH_Vihar\Day
15\streamwriter_ex.txt", true);
            sw.WriteLine("\n Object of StreamWriter");
            sw.WriteLine("\n Bunch of random text.");
            sw.Close();
            Console.WriteLine("\n File is appended.");

            //Reading the file
            StreamReader sr = new StreamReader(@"C:\Assignments_NH_Vihar\Day
15\streamwriter_ex.txt");
            sr.ReadToEnd();
            sr.Close();
            Console.WriteLine("\n File is read.");

            Console.ReadKey();
        }
    }
}
```

Output :



```
C:\WINDOWS\system32\cmd.exe

File is appended.

File is read.
Press any key to continue . . .
```

A screenshot of a Windows command prompt window. The title bar is blue and contains the text "C:\WINDOWS\system32\cmd.exe" along with standard window control icons (minimize, maximize, close). The command prompt area has a black background with white text. It displays three lines of output: "File is appended.", "File is read.", and "Press any key to continue . . .". A small white cursor is visible at the end of the third line.

Assignment 5

Write a C# code for Quiz app & store the scores in a text file.

Answer :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

namespace quiz_app
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("\n\t*****TECH QUIZ by Vihar.D*****\n");

            //Variable Declaration
            int score = 0, x;
            string name;
            Console.Write("\n Enter your Name : ");
            name = Console.ReadLine();
            Console.WriteLine("*****");
            Console.WriteLine($"HEY ! {name}, Here's a Quiz on Recent Technology");
            Console.WriteLine("*****");

            //1st Question-----
            Console.WriteLine("\nQ1. Which is the best processor manufactured by INTEL ?");
            Console.WriteLine("\n1. i5\t\t2. i3\t\t3. i9\t\t4. i7\n");
            Console.Write("\nEnter your answer : ");
            x = Convert.ToInt32(Console.ReadLine());
            if(x == 3)
            { score += 20; }

            //2nd Question-----
            Console.WriteLine("\nQ2. What is Elon Musk's automobile company name ?");
            Console.WriteLine("\n1. Ford\t\t2. Tesla\t3. Honda\t4. Porsche\n");
            Console.Write("\nEnter your answer : ");
```

```

x = Convert.ToInt32(Console.ReadLine());
if (x == 2)
{ score += 20; }

//3rd Question-----
Console.WriteLine("\nQ3. What's the current name of the social media company 'Facebook'
?");
Console.WriteLine("\n1. Whatsapp\t2. Instagram\t3. Snapchat\t4. Meta\n");
Console.Write("\nEnter your answer : ");
x = Convert.ToInt32(Console.ReadLine());
if (x == 4)
{ score += 20; }

//4th Question-----
Console.WriteLine("\nQ4. Which was the first cryptocurrency ever created ?");
Console.WriteLine("\n1. Ethereum\t2. Bitcoin\t3. DogeCoin\t4. PancakeSwap\n");
Console.Write("\nEnter your answer : ");
x = Convert.ToInt32(Console.ReadLine());
if (x == 2)
{ score += 20; }

//5th Question-----
Console.WriteLine("\nQ5. Which of them is latest Windows OS ?");
Console.WriteLine("\n1. Windows 11\t2. Windows Vistat3. Windows 8\t4. Windows 98\n");
Console.Write("\nEnter your answer : ");
x = Convert.ToInt32(Console.ReadLine());
if (x == 1)
{ score += 20; }

StreamWriter sw = new StreamWriter(@"C:\Assignments_NH_Vihar\Day 15\scores.txt",
true);
sw.WriteLine("\nName : {0} \t Score : {1}", name, score);
sw.Close();

Console.WriteLine("*****");
Console.WriteLine("\n Congrats! Your score has been submitted");
Console.WriteLine("\n-----");
Console.WriteLine("\n Contact ADMIN for queries.");
Console.WriteLine("*****");
}
}

```

Output :

```
C:\WINDOWS\system32\cmd.exe

*****TECH QUIZ by Vihar.D*****

Enter your Name : VD
*****

HEY ! VD, Here's a Quiz on Recent Technology
*****

Q1. Which is the best processor manufactured by INTEL ?
1. i5          2. i3          3. i9          4. i7

Enter your answer : 3

Q2. What is Elon Musk's automobile company name ?
1. Ford        2. Tesla        3. Honda        4. Porsche

Enter your answer : 2

Q3. What is the current name of the social media company 'Facebook' ?
1. Whatsapp    2. Instagram    3. Snapchat    4. Meta

Enter your answer : 4

Q4. Which was the first cryptocurrency ever created ?
1. Ethereum    2. Bitcoin      3. DogeCoin    4. PancakeSwap

Enter your answer : 2

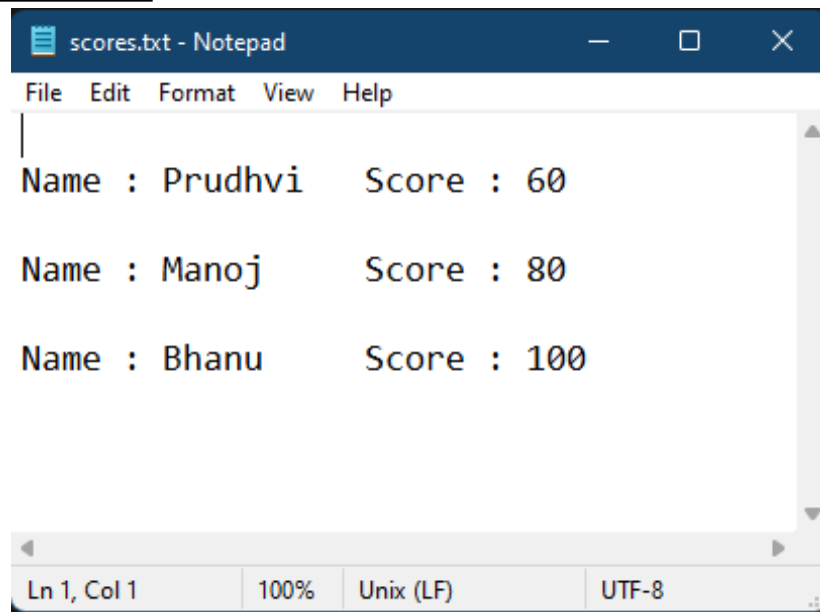
Q5. Which of them is latest Windows OS ?
1. Windows 11  2. Windows Vista  3. Windows 8    4. Windows 98

Enter your answer : 1
*****

Congrats! Your score has been submitted
-----

Contact ADMIN for queries.
*****
Press any key to continue . . .
```

Data Stored in Text File :



```
scores.txt - Notepad
File Edit Format View Help
Name : Prudhvi   Score : 60
Name : Manoj    Score : 80
Name : Bhanu    Score : 100
Ln 1, Col 1    100%    Unix (LF)    UTF-8
```