

Lab sheet 2

Question 3

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

namespace Question_3
{
    public class TemperatureTracker
    {

        public double[] Temperature = new double[7];

        public void InputTemp()
        {
            for (int i = 0 ; i < Temperature.Length ; i++)
            {
                Console.WriteLine($"Enter temperature for day {i}");
                Temperature[i] = double.Parse(Console.ReadLine());
            }
            Console.WriteLine("\n");
        }

        public void DisplayTemp()
        {

```

```

    }

    static void Main(string[] args)
    {
        TemperatureTracker week1 = new TemperatureTracker();

        week1.InputTemp();

        for (int i = 0; i < 7; i++) {

            Console.WriteLine(week1.week1Temp[i]);

        }
        Console.ReadLine();
    }
}

```

Question 04

Program.cs

```

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

namespace Labsheet2_que4
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Product Name: ");

```

```

        string product_name = Console.ReadLine();
        Console.WriteLine("Enter Product price: ");
        double price = double.Parse(Console.ReadLine());

        Product product1 = new Product( product_name , price);
        Console.WriteLine("\nProduct Name is: "+product1.ProductName);
        Console.WriteLine("Product price is: "+product1.price);

        Console.ReadLine();

    }

}
}

```

Product.cs

```

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

namespace Labsheet2_que4
{
    internal class Product
    {
        public string ProductName;
        public double price;

        public Product(string ProductName, double price)
        {
            this.ProductName = ProductName;
            this.price = price;
        }
    }
}

```

```
}  
}
```

Question 05

Program.cs

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
  
namespace Labsheet2_que5  
{  
    internal class Program  
    {  
        static void Main(string[] args)  
        {  
            LibraryBook[] books = new LibraryBook[5];  
  
            books[0] = new LibraryBook("Book 1", "Author 1", true);  
            books[1] = new LibraryBook("Book 2", "Author 2", false);  
            books[2] = new LibraryBook("Book 3", "Author 3", true);  
            books[3] = new LibraryBook("Book 4", "Author 4", false);  
            books[4] = new LibraryBook("Book 5", "Author 5", true);  
  
            DisplayLibraryStatus(books);  
            Console.WriteLine("\n");  
            books[0].BorrowBook();  
            Console.WriteLine("\n");  
            books[2].ReturnBook();  
            Console.WriteLine("\n");  
            DisplayLibraryStatus(books);  
        }  
    }  
}
```

```

        Console.ReadLine();

    }

    static void DisplayLibraryStatus(LibraryBook[] books)
    {
        Console.WriteLine("current library status: ");
        foreach (var book in books)
        {
            Console.WriteLine($"Title: {book.Title}, Author:
        }
    }
}

```

LibraryBooks.cs

```

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

namespace Labsheet2_que5
{
    internal class LibraryBook
    {
        public string Title;
        public string Author;
        public bool Available;
    }
}

```



```

        public LibraryBook(string Title, string Author ,bool Available)
        {
            this.Title = Title;                this.Author = Author;
            this.Available = Available;        }
        public void BorrowBook()
        {
            if(Available)
            {
                Available = false;

                Console.WriteLine($"You have borrowed '{Title}'

            }
            Console.WriteLine("\n\nUpdated library status");
        }

        public void ReturnBook()
        {
            if(!Available)
            {
                Available=true;
                Console.WriteLine($"You have returned
'{Title}'                }                else                {
                Console.WriteLine("Book already borrowed.");
            }
            Console.WriteLine("\n\nLibrary status updated.");
        }
    }

```

```
}  
}
```