

**LAB Assignment: 03**

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**Question no :01**

**Code:**

using System;

using System.Xml;

namespace xml

{

internal class Program

{

static void Main(string[] args)

{

XmlWriterSettings setting = new XmlWriterSettings();

setting.Indent = true;

setting.IndentChars = "\t";

String FileName = "breakfast\_menu.xml";

using (XmlWriter w = XmlWriter.Create(FileName, setting))

{

w.WriteStartDocument();

w.WriteStartElement("breakfast\_menu");

w.WriteStartElement("food");

w.WriteElementString("name", "Belgian Waffles");

w.WriteElementString("price", "$5.95");

w.WriteElementString("description", "Two of our famous Belgian Waffles with plenty of real maple syrup");

w.WriteElementString("calories", "650");

w.WriteEndElement();

w.WriteStartElement("food");

w.WriteElementString("name", "Strawberry Belgian Waffles");

w.WriteElementString("price", "$7.95");

w.WriteElementString("description", "Light Belgian waffles covered with strawberries and whipped cream");

w.WriteElementString("calories", "900");

w.WriteEndElement();

w.WriteEndElement();

w.WriteEndDocument();

}

Console.WriteLine("XML document created successfully: " + FileName);

Console.ReadLine();

}

}

}

**Question no :02**

**Code:**

using System;

using System.Xml;

class Program

{

static void Main()

{

string xmlFilePath = " E:\c#\breakfast menu.xml";

using (XmlReader reader = XmlReader.Create(xmlFilePath))

{

while (reader.Read())

{

if (reader.NodeType == XmlNodeType.Element)

{

Console.Write($"<{reader.Name}>");

if (reader.Read() && reader.NodeType == XmlNodeType.Text)

{

Console.Write(reader.Value);

}

Console.WriteLine($"</{reader.Name}>");

}

}

}

}

}

**Question no :03**

**Code:**

using System;

using System.Xml;

class Food

{

public string Name { get; set; }

public string Price { get; set; }

public string Description { get; set; }

public string Calories { get; set; }

public Food(string name, string price, string description, string calories)

{

Name = name;

Price = price;

Description = description;

Calories = calories;

}

}

class Program

{

static void Main(string[] args)

{

string FileName = "Breakfast\_Menu.xml";

using (XmlWriter writer = XmlWriter.Create(FileName))

{

writer.WriteStartElement("breakfast\_menu");

Food[] foods = new Food[]

{

new Food("Belgian Waffles", "$5.95", "Two of our famous Belgian Waffles with plenty of real maple syrup", "650"),

new Food("Strawberry Belgian Waffles", "$7.95", "Light Belgian waffles covered with strawberries and whipped cream", "900")

};

foreach (Food food in foods)

{

writer.WriteStartElement("food");

writer.WriteElementString("name", food.Name);

writer.WriteElementString("price", food.Price);

writer.WriteElementString("description", food.Description);

writer.WriteElementString("calories", food.Calories);

writer.WriteEndElement();

}

writer.WriteEndElement();

}

Console.WriteLine("XML document created successfully: " + FileName);

using (XmlReader reader = XmlReader.Create(FileName))

{

while (reader.Read())

{

if (reader.IsStartElement("food"))

{

string name = reader.ReadElementContentAsString("name", "");

string price = reader.ReadElementContentAsString("price", "");

string description = reader.ReadElementContentAsString("description", "");

string calories = reader.ReadElementContentAsString("calories", "");

Food food = new Food(name, price, description, calories);

Console.WriteLine($"Name: {food.Name}");

Console.WriteLine($"Price: {food.Price}");

Console.WriteLine($"Description: {food.Description}");

Console.WriteLine($"Calories: {food.Calories}");

Console.WriteLine();

}

}

}

Console.ReadLine();

}

}