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| A picture containing drawing, stop, room  Description automatically generated | Advanced Web Programming  Practical #1 | | |
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| **Subject/Course:** | **Advanced Web Programming** | | |
| **Topic** | **Working with basic C#** | | |
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| **1. Working with basic C#** | | | |
| **a) Create an application that obtains four int values from the user and displays the product.**  **Program**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace practical1a**  **{**  **class Program**  **{**  **static void Main(string[] args)**  **{**  **int num1, num2, num3, num4, prod;**  **Console.WriteLine("Enter numbur 1");**  **num1 = Convert.ToInt32(Console.ReadLine());**  **Console.WriteLine("Enter numbur 2");**  **num2 = Convert.ToInt32(Console.ReadLine());**  **Console.WriteLine("Enter numbur 3");**  **num3 = Convert.ToInt32(Console.ReadLine());**  **Console.WriteLine("Enter numbur 4");**  **num4 = Convert.ToInt32(Console.ReadLine());**  **prod = num1 \* num2 \* num3 \* num4;**  **Console.WriteLine(num1 + "\*" + num2 + "\*" + num3 + "\*" + num4 + "=" + prod);**  **Console.ReadLine();**  **}**  **}**  **}**  **Output** | | | |
| **b) Create an application to demonstrate string operations**  **Program**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace practical1b**  **{**  **class Program**  **{**  **static void Main(string[] args)**  **{**  **string s1,s2;**  **Console.WriteLine("Enter Your First and Last Name");**  **s1 = Console.ReadLine();**  **s2 = Console.ReadLine();**  **Console.WriteLine("trim" + s1.Trim());**  **Console.WriteLine("S1+S2" + String.Concat(s1,s2));**  **Console.WriteLine("ToUpper" + s1.ToUpper());**  **Console.WriteLine("ToLower" + s1.ToLower());**  **Console.WriteLine("Inder of i" + s1.IndexOf("i"));**  **Console.WriteLine("LastIndex of a" + s1.LastIndexOf("a"));**  **Console.WriteLine("Compare " + String.Compare(s1,s2));**  **Console.WriteLine("Remove 4 position " + s1.Remove(1));// remove the element after the given numbur**  **Console.WriteLine("Length of s1" + s1.Length);**  **Console.WriteLine("Replace e with i"+ s1.Replace("e","i"));**  **Console.WriteLine("Insert Hey " + s1.Insert(0,"Hey"));**  **Console.ReadKey();**    **}**  **}**  **}**  **Output** | | | |
| **c) Create an application that receives the (Student Id, Student Name, Course Name, Date of Birth) information from a set of students. The application should also display the information of all the students once the data entered.**  **Program**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace Practcal1c**  **{**  **class Program**  **{**  **struct student**  **{**  **public string stdId, name, cname;**  **public int day,month,years;**  **}**  **static void Main(string[] args)**  **{**  **student[] s = new student[2];**  **int i;**  **for(i=0; i<2;i++)**  **{**  **Console.WriteLine("Enter Student ID:");**  **s[i].stdId = Console.ReadLine();**  **Console.WriteLine("Enter Student Name:");**  **s[i].name = Console.ReadLine();**  **Console.WriteLine("Enter Student Course name:");**  **s[i].cname = Console.ReadLine();**  **Console.WriteLine("Enter Student date of birth Enter Day(1-31):");**  **s[i].day = Convert.ToInt32(Console.ReadLine());**  **Console.WriteLine("Enter Student date of birth Enter Month(1-12):");**  **s[i].month = Convert.ToInt32(Console.ReadLine());**  **Console.WriteLine("Enter Student date of birth Enter Year:");**  **s[i].years = Convert.ToInt32(Console.ReadLine());**  **}**  **Console.WriteLine("\nStudent List\n");**  **for (i = 0; i < 2; i++)**  **{**  **Console.WriteLine("Student ID "+s[i].stdId);**  **Console.WriteLine("Student Name " + s[i].name);**  **Console.WriteLine("Student Course " + s[i].cname);**  **Console.WriteLine("Enter Student DOB: " + s[i].day + "/" + s[i].month + "/" + s[i].years);**  **}**  **Console.ReadKey();**  **}**  **}**  **}**  **Output** | | | |
| **d) Create an application to demonstrate following operations:**   1. **Generate Fibonacci series.** 2. **Test for prime numbers.** 3. **Test for vowels.** 4. **Use of foreach loop with arrays**   **Program**  **1.Generate Fibonacci series.**  **Code**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace pratical1d1**  **{**  **class Fibonacci**  **{**  **static void Main(string[] args)**  **{**  **int n1 = 0, n2 = 1, n3, n;**  **Console.Write("Enter a number: ");**  **n = Convert.ToInt32(Console.ReadLine());**  **Console.Write("\nFibonacci Series\n");**  **Console.Write(n1 + "\t" + n2);**  **for (int i = 3; i <= n; i++)**  **{**  **n3 = n1 + n2;**  **Console.Write("\t" + n3);**  **n1 = n2;**  **n2 = n3;**  **}**  **Console.ReadKey();**  **}**  **}**  **}**  **Output**    **2.Test for prime numbers.**  **Code**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace testprime**  **{**  **class Prime**  **{**  **static void Main(string[] args)**  **{**  **int num, counter;**  **Console.Write("Enter number:");**  **num = int.Parse(Console.ReadLine());**  **for (counter = 2; counter <= num / 2; counter++)**  **{**  **if ((num % counter) == 0)**  **break;**  **}**  **if (num == 1)**  **Console.WriteLine(num + " is neither prime nor composite");**  **else if (counter <= (num / 2))**  **Console.WriteLine(num + " is not prime number");**  **else**  **Console.WriteLine(num + " is prime number");**  **Console.ReadKey();**  **}**  **}**  **}**  **Output**    **3. Test for vowels.**  **Code**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace practical1d3**  **{**  **class Vowels**  **{**  **static void Main(string[] args)**  **{**  **char ch;**  **Console.Write("Enter a character: ");**  **ch = (char)Console.Read();**  **switch (ch)**  **{**  **case 'a':**  **case 'A':**  **case 'E':**  **case 'e':**  **case 'I':**  **case 'i':**  **case 'O':**  **case 'o':**  **case 'U':**  **case 'u':**  **Console.WriteLine(ch + " is Vowel");**  **break;**  **default:**  **Console.WriteLine(ch + " is not a vowel");**  **break;**  **}**  **Console.ReadKey();**  **}**  **}**  **}**  **Output**      **4.Use of foreach loop with arrays**  **Code**  **using System;**  **using System.Collections.Generic;**  **using System.Linq;**  **using System.Text;**  **using System.Threading.Tasks;**  **namespace practical1d4**  **{**  **class Vowels**  **{**  **static void Main(string[] args)**  **{**  **string[] str = { "Advanced", "Web", "Programming" };**  **foreach (string s in str)**  **{**  **Console.WriteLine(s);**  **}**  **Console.ReadKey();**  **}**  **}**  **}**  **Output** | | | |
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