

Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

5

LIST OF TASKS

TASK NO	OBJECTIVE
1	Create a simple program to check whether the number is even or odd
2	Create a simple calculator using if else condition in which you will take two number as input and ask user which operation he/she wants to perform.
3	Write a Program using nested ifs in which the user is asked to do the following: a. Confirm if user wants to play the game "Guess the secret number" b. If false, then print message "Maybe next time"; if true, then ask "Enter your age" c. If age is less than 5 then print "You are too young to play", else ask "Enter any number". d. If number is equal to the secret number then print "You have successfully guessed the secret number; else print "You were not successful in guessing the secret number".
4	Create simple application which will check the vowel using switch case.
5	Create a program of BUKC CHECKIN SYSTEM.

Submitted On:

(Date: DD/MM/YY)

Task 1

Create a simple program to check whether the number is even or odd.

Solution:

```
using System;

namespace Lab_5_Task_1
{
    class Program
    {
        static void Main(string[] args)
        {
            double no;
            Console.WriteLine("Enter a number:");
            no = Convert.ToDouble(Console.ReadLine());
            string result = ((int)no % 2 == 0) ? "Even" : "Odd";
            Console.WriteLine(result);
        }
    }
}
```

Output:

Microsoft Visual Studio Debug Console

Enter a number:

56.5

Even

E:\vs\Lab 5 Task 1\bin\Debug\net5.0\Lab 5 Task 1.exe (process 9984) exited with code 0.
Press any key to close this window . . .

Task 2


Create a simple calculator using if else condition in which you will take two number as input and ask user which operation he/she wants to perform.

Solution:

```
using System;

namespace Lab_5_Task_1
{
    class Program
    {
        static void Main(string[] args)
        {
            string oper;
            double x, y;
            Console.WriteLine("\t\tCALCULATOR");
            Console.WriteLine("Enter the arithmetic operation you want to calculate (+ , - , / , *):");
            oper = Console.ReadLine();
            Console.WriteLine("Enter the two numbers. (Press Enter after entering the first number)");
            x = Convert.ToDouble(Console.ReadLine());
            y = Convert.ToDouble(Console.ReadLine());
            if(oper=="+")
            {
                Console.WriteLine("{0} + {1} = {2}",x,y,x+y);
            }
            else if (oper == "+")
            {
                Console.WriteLine("{0} + {1} = {2}", x, y, x + y);
            }
            else if (oper == "-")
            {
                Console.WriteLine("{0} - {1} = {2}", x, y, x - y);
            }
            else if (oper == "*")
            {
                Console.WriteLine("{0} * {1} = {2}", x, y, x * y);
            }
            else if (oper == "/")
            {
                Console.WriteLine("{0} / {1} = {2:0.00}", x, y, x / y);
            }
            else
            {
                Console.WriteLine("INVALID INPUT :(");
            }
        }
    }
}
```

Output:

 Microsoft Visual Studio Debug Console

```
CALCULATOR
Enter the arithmetic operation you want to calculate (+ , - , / , *):
/
Enter the two numbers. (Press Enter after entering the first number)
5
3
5 / 3 = 1.67

E:\vs\Lab 5 Task 1\bin\Debug\net5.0\Lab 5 Task 1.exe (process 2072) exited with code 0.
Press any key to close this window . . .
```

Task 3

Write a Program using nested ifs in which the user is asked to do the following:


- Confirm if user wants to play the game "Guess the secret number"
- If false, then print message "Maybe next time"; if true, then ask "Enter your age"
- If age is less than 5 then print "You are too young to play", else ask "Enter any number".
- If number is equal to the secret number then print "You have successfully guessed the secret number; else print "You were not successful in guessing the secret number".

Solution:

```
using System;

namespace Zain_Lab_5_Task_2
{
    class Program
    {
        static void Main(string[] args)
        {
            int x = 2401;
            string ans;
            Console.WriteLine("GUESSING THE SECRET NUMBER");
            Console.WriteLine("Do you want to play? \n yes or no");
            ans = Console.ReadLine();
            if (ans=="yes")
            {
                Console.WriteLine("Enter your age");
                int age = Convert.ToInt32(Console.ReadLine());
                if (age<6)
                {
                    Console.WriteLine("You aren't eligible to play! Better Luck Next Time:( ");
                }
                else
                {
                    Console.WriteLine("Guess the Number:");
                    int n = Convert.ToInt32(Console.ReadLine());
                    if (n==2401)
                    { Console.WriteLine("YOU'VE GUESSED THE RIGHT NUMBER!");
                    }
                    else
                    {
                        Console.WriteLine("Sorry, Try Again!");
                    }
                }
            }
            else
            { Console.WriteLine("Alright! Bye Bye"); }
        }
    }
}
```

Output:

 Microsoft Visual Studio Debug Console

```
GUESSING THE SECRET NUMBER
```

```
Do you want to play?
```

```
yes or no
```

```
yes
```

```
Enter your age
```

```
18
```

```
Guess the Number:
```

```
2401
```

```
YOU'VE GUESSED THE RIGHT NUMBER!
```

```
E:\vs\Lab 5 Task 3\bin\Debug\net5.0\Lab 5 Task 3.exe (process 14284) exited with code 0.
```

```
Press any key to close this window . . .
```

Task 4

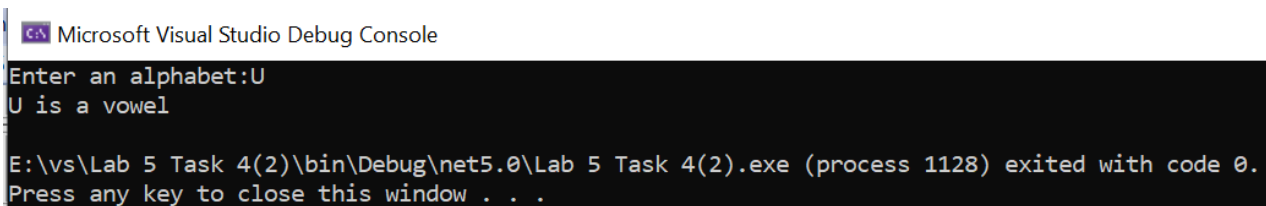
Create simple application which will check the vowel using switch case.

Solution:

```
using System;

namespace Lab_5_Task_4_2_
{
    class Program
    {
        static void Main(string[] args)
        {
            char ch;
            Console.Write("Enter an alphabet:");
            ch = Convert.ToChar(Console.ReadLine());
            switch(ch)
            {
                case 'a': case 'A':
                case 'e': case 'E':
                case 'i': case 'I':
                case 'o': case 'O':
                case 'u': case 'U':
                    Console.WriteLine("{0} is a vowel",ch);
                    break;
                default:
                    Console.WriteLine("{0} isn't a vowel",ch);
                    break;
            }
        }
    }
}
```

Output:



Microsoft Visual Studio Debug Console

```
Enter an alphabet:U
U is a vowel

E:\vs\Lab 5 Task 4(2)\bin\Debug\net5.0\Lab 5 Task 4(2).exe (process 1128) exited with code 0.
Press any key to close this window . . .
```

Task 5

Create a program of BUKC CHECKIN SYSTEM.

Solution:

```
using System;

namespace Zain_Lab_5
{
    class Program
    {
        static void Main(string[] args)
        {
            string i;
            Console.WriteLine("Select any option:\na)Bahrian \nb)Alumnia \nc)Outsider");
            i = Console.ReadLine();
            if (i == "a" || i == "A" || i == "B" || i == "b" || i == "C" || i == "c") ;
            {
                if (i == "a" || i == "A")
                {
                    Console.WriteLine("Enter your name:");
                    string name = Console.ReadLine();
                    Console.WriteLine("Enter your Dept.:");
                    string dept = Console.ReadLine();
                    Console.WriteLine("Enter your enrollment number:");
                    string enroll = Console.ReadLine();
                    DateTime dt = DateTime.Now;
                    Console.Clear();
                    Console.WriteLine("\t<<<<<<< BUKC CHECK-IN SYSTEM >>>>>>>");
                    Console.WriteLine("-----");
                    Console.WriteLine("Created by: Muhammad Zain {0:hh:mm:ss} {1:dd/MMM/yy}", dt, dt);
                    Console.WriteLine("-----");
                    Console.WriteLine("Name: {0}", name);
                    Console.WriteLine("Enrollment No.: {0}", enroll);
                    Console.WriteLine("Department: {0}", dept);
                    Console.WriteLine("Thankyou for Visiting BUKC!");
                }
                else if (i == "b" || i == "B")
                {
                    Console.WriteLine("Enter your name:");
                    string name = Console.ReadLine();
                    Console.WriteLine("Enter your Dept.:");
                    string dept = Console.ReadLine();
                    Console.WriteLine("Enter your cnic number:");
                    string cnic = Console.ReadLine();
                    DateTime dt = DateTime.Now;
                    Console.Clear();
                    Console.WriteLine("\t<<<<<<< BUKC CHECK-IN SYSTEM >>>>>>>");
                    Console.WriteLine("-----");
                    Console.WriteLine("Created by: Muhammad Zain {0:hh:mm:ss} {1:dd/MMM/yy}", dt, dt);
                    Console.WriteLine("-----");
                    Console.WriteLine("Name: {0}", name);
                }
            }
        }
    }
}
```


CSC-113 Computer Programming

Conditional Statements

Output:

```
<<<<<< BUKC CHECK-IN SYSTEM >>>>>>
-----
Created by: Muhammad Zain 05:58:43 13/Nov/21
-----
Name: Zain
Enrollment No.: 02-131212-077
Department: BSE
Thankyou for Visiting BUKC!

E:\vs\Lab 5 Task 5\bin\Debug\net5.0\Lab 5 Task 5.exe (process 8380) exited with code 0.
Press any key to close this window . . .
```