



HUMAN COMPUTER INTERACTION

“LAB 05”



TANZEELA ASGHAR

2021-BSE-032

VI -A

TASK 1

Create a user interface to take data from user in 5 different tabs

Tab 1 = Name

Tab 2 = NIC no

Tab 3 = Date of birth

Tab 4 = email address

Tab 5 = GPA

Also create a button Display which (on click display the details entered in Message box.

PROGRAM:


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace HCI_LAB_5_1
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        String name, nic, dob, email;
        double gpa;
        private void button1_Click(object sender, EventArgs e)
        {
            name = textBox1.Text;
            nic = textBox2.Text;
            dob = textBox3.Text;
            email = textBox4.Text;
            gpa = double.Parse(textBox5.Text);
            MessageBox.Show("Name: " + name + "\nNIC # " + nic + "\nDate of Birth: " + dob +
                "\nEmail: " + email
                + "\nGPA: " + gpa);
        }
    }
}
```

OUTPUT:

Form1

tabPage1 tabPage2 tabPage3 tabPage4 tabPage5


NAME: TANZEELA ASGHAR



Form1

tabPage1 tabPage2 tabPage3 tabPage4 tabPage5


NIC NO: 3-5075523780-3



Form1

tabPage1 tabPage2 tabPage3 tabPage4 tabPage5


DOB: 26/09/2002

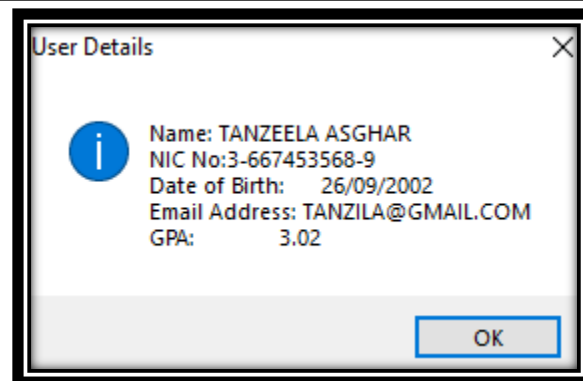
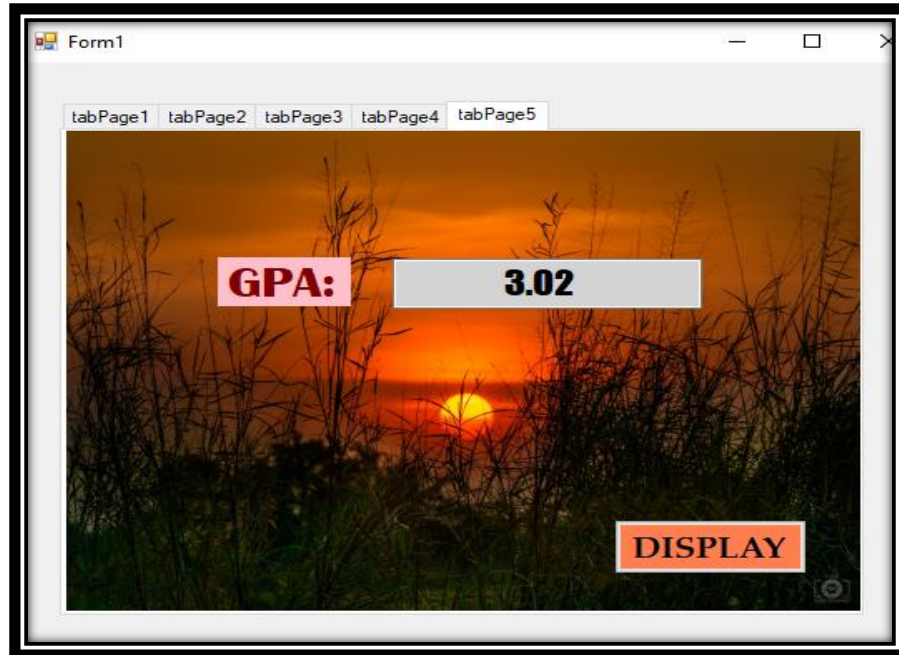


Form1

tabPage1 tabPage2 tabPage3 tabPage4 tabPage5

EMAIL: TANZILA@GMAIL.COM





TASK 2:

Create a user interface for exam having 15 multiple choice question in 3 different tabs

Tab 1 (5 questions from Analytical)

Tab 2 (5 questions from English)

Tab 3 (5 questions from Quantitative)

Provide 5 options A,B,C,D,E for each question .User will be allowed to select only one option for each question. There will be a button SUBMIT EXAM when user press then all the answers should be displayed that were selected by the user.

PROGRAM:

```
using System;  
using System.Collections.Generic;  
using System.ComponentModel;
```

```

using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace Lab_5_Task_2
{
    public partial class Form1 : Form
    {
        String selectedText;
        public Form1()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            string answer = " ";
            if (radioButton1.Checked)
            {
                answer = answer + radioButton1.Text + "\n";
            }
            if (radioButton2.Checked)
            {
                answer = answer + radioButton2.Text + "\n";
            }
            if (radioButton3.Checked)
            {
                answer = answer + radioButton3.Text + "\n";
            }
            if (radioButton4.Checked)
            {
                answer = answer + radioButton4.Text + "\n";
            }
            if (radioButton76.Checked)
            {
                answer = answer + radioButton76.Text + "\n";
            }
            if (radioButton76.Checked)
            {
                answer = answer + radioButton76.Text + "\n";
            }
            if (radioButton6.Checked)
            {
                answer = answer + radioButton6.Text + "\n";
            }
        }
    }
}

```

```
}  
if (radioButton7.Checked)  
{  
    answer = answer + radioButton7.Text + "\n";  
}  
if (radioButton8.Checked)  
{  
    answer = answer + radioButton8.Text + "\n";  
}  
if (radioButton9.Checked)  
{  
    answer = answer + radioButton9.Text + "\n";  
}  
if (radioButton10.Checked)  
{  
    answer = answer + radioButton10.Text + "\n";  
}  
if (radioButton11.Checked)  
{  
    answer = answer + radioButton11.Text + "\n";  
}  
if (radioButton12.Checked)  
{  
    answer = answer + radioButton12.Text + "\n";  
}  
if (radioButton13.Checked)  
{  
    answer = answer + radioButton13.Text + "\n";  
}  
if (radioButton14.Checked)  
{  
    answer = answer + radioButton14.Text + "\n";  
}  
if (radioButton15.Checked)  
{  
    answer = answer + radioButton15.Text + "\n";  
}  
if (radioButton16.Checked)  
{  
    answer = answer + radioButton16.Text + "\n";  
}  
if (radioButton17.Checked)  
{  
    answer = answer + radioButton17.Text + "\n";  
}
```

```
}  
if (radioButton18.Checked)  
{  
answer = answer + radioButton18.Text + "\n";  
}  
if (radioButton19.Checked)  
{  
answer = answer + radioButton19.Text + "\n";  
}  
if (radioButton20.Checked)  
{  
answer = answer + radioButton20.Text + "\n";  
}  
if (radioButton21.Checked)  
{  
answer = answer + radioButton21.Text + "\n";  
}  
if (radioButton22.Checked)  
{  
answer = answer + radioButton22.Text + "\n";  
}  
if (radioButton23.Checked)  
{  
answer = answer + radioButton23.Text + "\n";  
}  
if (radioButton24.Checked)  
{  
answer = answer + radioButton24.Text + "\n";  
}  
if (radioButton25.Checked)  
{  
answer = answer + radioButton25.Text + "\n";  
}  
if (radioButton26.Checked)  
{  
answer = answer + radioButton26.Text + "\n";  
}  
if (radioButton27.Checked)  
{  
answer = answer + radioButton27.Text + "\n";  
}  
if (radioButton28.Checked)  
{  
answer = answer + radioButton28.Text + "\n";  
}
```

```
}  
if (radioButton29.Checked)  
{  
    answer = answer + radioButton29.Text + "\n";  
}  
if (radioButton30.Checked)  
{  
    answer = answer + radioButton30.Text + "\n";  
}  
if (radioButton31.Checked)  
{  
    answer = answer + radioButton31.Text + "\n";  
}  
if (radioButton32.Checked)  
{  
    answer = answer + radioButton32.Text + "\n";  
}  
if (radioButton33.Checked)  
{  
    answer = answer + radioButton33.Text + "\n";  
}  
if (radioButton34.Checked)  
{  
    answer = answer + radioButton34.Text + "\n";  
}  
if (radioButton35.Checked)  
{  
    answer = answer + radioButton35.Text + "\n";  
}  
if (radioButton36.Checked)  
{  
    answer = answer + radioButton36.Text + "\n";  
}  
if (radioButton37.Checked)  
{  
    answer = answer + radioButton37.Text + "\n";  
}  
if (radioButton38.Checked)  
{  
    answer = answer + radioButton38.Text + "\n";  
}  
if (radioButton39.Checked)  
{  
    answer = answer + radioButton39.Text + "\n";  
}
```



```
}
if (radioButton40.Checked)
{

answer = answer + radioButton40.Text + "\n";
}
if (radioButton41.Checked)
{
answer = answer + radioButton41.Text + "\n";
}
if (radioButton42.Checked)
{
answer = answer + radioButton42.Text + "\n";
}
if (radioButton43.Checked)
{
answer = answer + radioButton43.Text + "\n";
}
if (radioButton44.Checked)
{
answer = answer + radioButton44.Text + "\n";
}
if (radioButton45.Checked)
{
answer = answer + radioButton45.Text + "\n";
}
if (radioButton46.Checked)
{
answer = answer + radioButton46.Text + "\n";
}
if (radioButton47.Checked)
{
answer = answer + radioButton47.Text + "\n";
}
if (radioButton48.Checked)
{
answer = answer + radioButton48.Text + "\n";
}
if (radioButton49.Checked)
{
answer = answer + radioButton49.Text + "\n";
}
if (radioButton50.Checked)
{
```

```
answer = answer + radioButton50.Text + "\n";
}
if (radioButton51.Checked)
{
answer = answer + radioButton51.Text + "\n";
}
if (radioButton52.Checked)
{
answer = answer + radioButton52.Text + "\n";
}
if (radioButton53.Checked)
{
answer = answer + radioButton53.Text + "\n";
}
if (radioButton54.Checked)
{
answer = answer + radioButton54.Text + "\n";
}
if (radioButton55.Checked)
{
answer = answer + radioButton55.Text + "\n";
}
if (radioButton56.Checked)
{
answer = answer + radioButton56.Text + "\n";
}
if (radioButton57.Checked)
{
answer = answer + radioButton57.Text + "\n";
}
if (radioButton58.Checked)
{
answer = answer + radioButton58.Text + "\n";
}
if (radioButton59.Checked)
{
answer = answer + radioButton59.Text + "\n";
}
if (radioButton60.Checked)
{
answer = answer + radioButton60.Text + "\n";
}
if (radioButton61.Checked)
{
```

```
answer = answer + radioButton61.Text + "\n";
}
if (radioButton62.Checked)

{
answer = answer + radioButton62.Text + "\n";
}
if (radioButton63.Checked)
{
answer = answer + radioButton63.Text + "\n";
}
if (radioButton64.Checked)
{
answer = answer + radioButton64.Text + "\n";
}
if (radioButton65.Checked)
{
answer = answer + radioButton65.Text + "\n";
}
if (radioButton66.Checked)
{
answer = answer + radioButton66.Text + "\n";
}
if (radioButton67.Checked)
{
answer = answer + radioButton67.Text + "\n";
}
if (radioButton68.Checked)
{
answer = answer + radioButton68.Text + "\n";
}
if (radioButton69.Checked)
{
answer = answer + radioButton69.Text + "\n";
}
if (radioButton70.Checked)
{
answer = answer + radioButton70.Text + "\n";
}
if (radioButton71.Checked)
{
answer = answer + radioButton71.Text + "\n";
}
if (radioButton72.Checked)
```

```

{
answer = answer + radioButton72.Text + "\n";
}
if (radioButton73.Checked)
{
answer = answer + radioButton73.Text + "\n";
}
if (radioButton74.Checked)
{
answer = answer + radioButton74.Text + "\n";
}
if (radioButton75.Checked)
{
answer = answer + radioButton75.Text + "\n";
}
MessageBox.Show(answer);
}}

```

OUTPUT:

Form1

Analytical English Quantitative

Nine individuals: Ahmed, Bilal, Danish, Faisal, Haroon, Liaquat, Maryam, Shiza and Zeeshan are to serve on three committees labeled A, B and C. Each candidate should serve on exactly one of the committees. Every committee must have atleast one member. Committee A should consist of exactly one member more than that of committee B. Among Maryam, Shiza and Zeeshan none can serve on committee A. Among Faisal, Haroon and Liaquat none can serve on committee B. Among Ahmed, Bilal and Danish none can serve on committee C.

1) In case Danish and Zeeshan are the individuals serving on committee B, how many of the nine individuals should serve on committee C?

☐ 2 ☐ 3 ☒ 4 ☐ 5 ☐ 6

2) Of the nine individuals, the maximum number that can serve together on committee C is

☐ 5 ☒ 6 ☐ 7 ☐ 8 ☐ 9

3) In case Ahmed is the only individual serving on committee B, which among the following should serve on committee A?

☒ Bilal and Danish ☐ Bilal and Faisal ☐ Bilal and Liaquat ☐ Faisal and Haroon ☐ Danish and Haroon

4) In case, any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?

☐ Ahmed ☐ Bilal ☐ Danish ☐ Liaquat ☒ Shiza

5) In case, Bilal, Danish and Maryam are the only individuals serving on committee B, the total membership of committee C should be

☐ 5 ☐ 4 ☐ 3 ☒ 2 ☐ 1

Submit Exam

Form1

Analytical English Quantitative

1) What they are doing does not seem ____ working.

☐ be ☐ being ☐ been ☒ to be ☐ None of these

2) She is going to quit her job ____ they give her a pay rise.

☐ or ☐ until ☒ unless ☐ providing ☐ None of these

3) Near the historic monument, there is a bridge ____ the Thames River.

☐ above ☒ over ☐ off ☐ toward ☐ going

4) Katherine has finished her work, now she is ____ home.

☒ going ☐ going to ☐ going to the ☐ going towards the ☐ go

5) It's the first time I ____ sea food in my life.

☐ eat ☐ eaten ☒ have eaten ☐ had eaten ☐ None of these

Submit Exam

Form1

Analytical English Quantitative

1) If $f(x) = 2x^2 - 3x + 1$, then $f(-1) = ?$

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☒ 4

2) What is the 101st term of the sequence: 1, 4, 7, 10, ... ?

☐ 281 ☐ 291 ☒ 301 ☐ 311 ☐ 312

3) $7/8$ of 96 is

☐ 76 ☐ 80 ☐ 74 ☐ 86 ☒ 84

4) $4 + 4 \cdot 4 / 4 = ?$

☐ 6 ☐ 2 ☐ 3 ☒ 4 ☐ 8

5) 15% of 32 equal ?

☐ 2.8 ☐ 3.8 ☒ 4.8 ☐ 5.8 ☐ 6.8

Submit Exam

Form1

Analytical English Quantitative

Nine individuals: Ahmed, Bilal, Danish, Faisal, Haroon, Liaquat, Maryam, Shiza and Zeeshan are to serve on three committees labeled A, B and C. Each candidate should serve on exactly one of the committees. Every committee must have atleast one member. Committee A should consist of exactly one member more than that of committee B. Among Maryam, Shiza and Zeeshan none can serve on committee A. Among Faisal, Haroon and Liaquat none can serve on committee B. Among Ahmed, Bilal and Danish none can serve on committee C.

1) In case Danish and Zeeshan are the individuals serving on committee B, how many of the nine individuals should serve on committee A?

☐ 2 ☐ 3 ☒ 4 ☐ 5 ☐ 6

2) Of the nine individuals, the maximum number that can serve together on committee C is

☐ 5 ☒ 6 ☐ 7 ☐ 8 ☐ 9

3) In case Ahmed is the only individual serving on committee B, which among the following should serve on committee A?

☒ Bilal and Danish ☐ Bilal and Faisal ☐ Bilal and Liaquat ☐ Faisal and Haroon ☐ Danish and Zeeshan

4) In case, any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?

☐ Ahmed ☐ Bilal ☐ Danish ☐ Liaquat ☒ Shiza

5) In case, Bilal, Danish and Maryam are the only individuals serving on committee B, the total membership of committee C is

☐ 5 ☐ 4 ☐ 3 ☒ 2 ☐ 1

Submit Exam

OK

TASK 3:

Modify task # 02 now result should be displayed after submission of the exam

no of correct answers = 12

no of wrong answers = 3

Result = 80%

Note if user does not select any answer from the given choices then answer should be treated as wrong.

PROGRAM:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace Lab_5_Task_2
{
    public partial class Form1 : Form
    {
        String selectedText;
        public Form1()
        {
            InitializeComponent();
        }
    }
}
```

```

}
private void button1_Click(object sender, EventArgs e)
{
    int totalQuestions = 15; // 3 tabs with 5 questions each
    int correctAnswers = 0;
    int wrongAnswers = 0;
    // Evaluate answers on first tab
    if (radioButton3.Checked) correctAnswers++;
    if (radioButton7.Checked) correctAnswers++;
    if (radioButton11.Checked) correctAnswers++;
    if (radioButton20.Checked) correctAnswers++;
    if (radioButton24.Checked) correctAnswers++;
    // Evaluate answers on second tab
    if (radioButton47.Checked) correctAnswers++;
    if (radioButton43.Checked) correctAnswers++;
    if (radioButton39.Checked) correctAnswers++;
    if (radioButton35.Checked) correctAnswers++;
    if (radioButton28.Checked) correctAnswers++;
    // Evaluate answers on third tab
    if (radioButton72.Checked) correctAnswers++;
    if (radioButton68.Checked) correctAnswers++;
    if (radioButton61.Checked) correctAnswers++;
    if (radioButton57.Checked) correctAnswers++;
    if (radioButton53.Checked) correctAnswers++;
    wrongAnswers = totalQuestions - correctAnswers;
    float percentage = 0;
    percentage = ((correctAnswers * 100) / 15);
    // Display result
    MessageBox.Show("correct answers: " + correctAnswers + " out of " +
        totalQuestions +
        "\nwrong answers : " + wrongAnswers + "\nPercentage:" + percentage +
        "%");
}
}
}
}

```

Form1

Analytical English Quantitative

Nine individuals: Ahmed, Bilal, Danish, Faisal, Haroon, Usqat, Maryam, Shiza and Zeeshan are to serve on three committees labeled A, B and C.
 Each candidate should serve on exactly one of the committees
 Every committee must have atleast one member
 Committee A should consist of exactly one member more than that of committee B
 Among Maryam, Shiza and Zeeshan none can serve on committee A
 Among Faisal, Haroon and Usqat none can serve on committee B
 Among Ahmed, Bilal and Danish none can serve on committee C

1) In case Danish and Zeeshan are the individuals serving on committee B, how many of the nine individuals should serve on committee C?

☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐ 6

2) Of the nine individuals, the maximum number that can serve together on committee C is

☐ 5 ☒ 6 ☐ 7 ☐ 8 ☐ 9

3) In case Ahmed is the only individual serving on committee B, which among the following should serve on committee A?

☐ Bilal and Danish ☐ Bilal and Faisal ☒ Bilal and Usqat ☐ Faisal and Haroon ☐ Danish and Haroon

4) In case, any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?

☐ Ahmed ☐ Bilal ☐ Danish ☐ Usqat ☒ Shiza

5) In case, Bilal, Danish and Maryam are the only individuals serving on committee B, the total membership of committee C should be

☐ 5 ☐ 4 ☐ 3 ☒ 2 ☐ 1

Submit Exam

correct answers: 11 out of 15
 wrong answers :4
 Percentage:73%

OK

TASK 4:

Modify task # 03 Give user 5 minutes to complete the quiz

in start background color should be default

after 4 minutes the background color should be converted to Red

after 5 minutes message should be displayed “Times up ” and result should be displayed.

PROGRAM:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
namespace HCI_Lab_5
{
    public partial class Form1 : Form
    {
        String selectedText;
        public Form1()
        {
            InitializeComponent();
        }
    }
}
```



```

private void timer1_Tick(object sender, EventArgs e)
{
    timer1.Enabled = true;
    int fourmin = 60000;
    int fivemin = 300000;
    timer1.Interval = 300000;
    timer1.Tick += timer1_Tick;
    int remainingtime = fivemin;
    timer1.Start();
    remainingtime--;
    if (remainingtime == fourmin)
    {
        tabPage1.BackColor = Color.Red;
        tabPage2.BackColor = Color.Red;
        tabPage3.BackColor = Color.Red;
    }
    if (timer1.Interval == fivemin)
    {
        timer1.Stop();
        timer1.Dispose();
        int totalQuestions = 15; // 3 tabs with 5 questions each
        int correctAnswers = 0;
        int wrongAnswers = 0;
        // Evaluate answers on first tab
        if (radioButton2.Checked) correctAnswers++;
        if (radioButton10.Checked) correctAnswers++;
        if (radioButton14.Checked) correctAnswers++;
        if (radioButton18.Checked) correctAnswers++;
        if (radioButton22.Checked) correctAnswers++;
        // Evaluate answers on second tab
        if (radioButton49.Checked) correctAnswers++;
        if (radioButton43.Checked) correctAnswers++;
        if (radioButton37.Checked) correctAnswers++;
        if (radioButton35.Checked) correctAnswers++;
        if (radioButton28.Checked) correctAnswers++;
        // Evaluate answers on third tab
        if (radioButton72.Checked) correctAnswers++;
        if (radioButton68.Checked) correctAnswers++;
        if (radioButton61.Checked) correctAnswers++;
        if (radioButton57.Checked) correctAnswers++;
        if (radioButton53.Checked) correctAnswers++;
        wrongAnswers = totalQuestions - correctAnswers;
        float percentage = 0;
        percentage = ((correctAnswers * 100) / 15);
    }
}

```

```
// Display result
MessageBox.Show("correct answers: " + correctAnswers + " out of " + totalQuestions +
"\nwrong answers : " + wrongAnswers + "\nPercentage:" + percentage + "%");
}}}
```

OUTPUT:

