

1. DataGridView – datasheet asking people about the movies they watched

Example of the form:

The screenshot shows a Windows form titled "Form1" with a DataGridView table and several controls. The table has four columns: "Movie Title", "Sex", and "Liked it?". The first row contains "Titanic", "Female", and a checked checkbox. The second row contains "MadMax", "Male", and an unchecked checkbox. The third row is empty, with a dropdown menu open showing "Male" and "Female" options. Below the table are three buttons: "Save values", "Choose folder", and a text box containing "movies".

Movie Title	Sex	Liked it?
Titanic	Female	<input checked="" type="checkbox"/>
MadMax	Male	<input type="checkbox"/>
	Male Female	<input type="checkbox"/>

Buttons: Save values, Choose folder

Text box: movies

Create a form with controls displayed on the example. Columns are:

- Movie title - Text field
- Sex – combobox with values „Male“ or „Female“
- Liked it? – Checkbox

Button „Choose folder“ – chooses the folder for saving. Display it on the label too!

Button „Save values“ – saves the values to a file.

NB! Male and female answers have to be in a separate file. If user enters in the file name text box „movies“ then 2 files should be created:

- movies_female.txt -> contains answers only by women
- movies_male.txt -> contains answers only by men

Tips:

- Remember the task from class.
- Check the index of the column where info about sex is kept; you can use this column to determine for each answer whether it was created by a male or female. Create 2 stream writers (one for each file).
- Do the task piece by piece; try first writing all info to a file; then writing info only about males or females. Then add writing to separate .txt files.

Task 2: annoying background painter

See the example of expected result (close the notification and download the .exe file):

<https://www.dropbox.com/s/yy8qwhsm5uxau6d/WindowsFormsApp1.exe?dl=0>

Movement is started from top left (0,0). With each timer tick, a line with length 10 is drawn. If the bottom of the form is reached then line moves to the right and starts going upwards again until it reaches the upper edge. Then moves again to right and continues down.

Line drawing starts when button is pressed!



Tips:

- In the example timer tick is 3ms and color is changed after drawing every line (after every line with height of 10.). Line width is 4.
- Draw the coordinates on the paper to visualise it. Draw the possible line movement and how the coordinates change! (0,0; 0,10; 0,20 etc). Do the solution step-by-step.
- Line moving direction is changed and line moved to right when:
 - bottom (`this.ClientSize.Height`) or more is reached
 - or when top (`Y=0`) is reached
- First do it with a slower timer tick interval to see what is happening and use only one color. Add changing of the colors as a last step.
- How to create a pen with random color and width of 4:

```
Pen pen=new Pen(Color.FromArgb((byte)random.Next(0, 255), (byte)random.Next(0, 255), (byte)random.Next(0, 255)), 4);
```

Screenshot from the expected result:



Task 3: mouse click info displayer

Adding events: [https://msdn.microsoft.com/en-us/library/zwwsdtbk\(v=vs.100\).aspx](https://msdn.microsoft.com/en-us/library/zwwsdtbk(v=vs.100).aspx)

Add a label on the form. Add „MouseDown“ event on the form.

For every mouse click: Display the coordinates of the point where the user clicked on the label (only the last point).