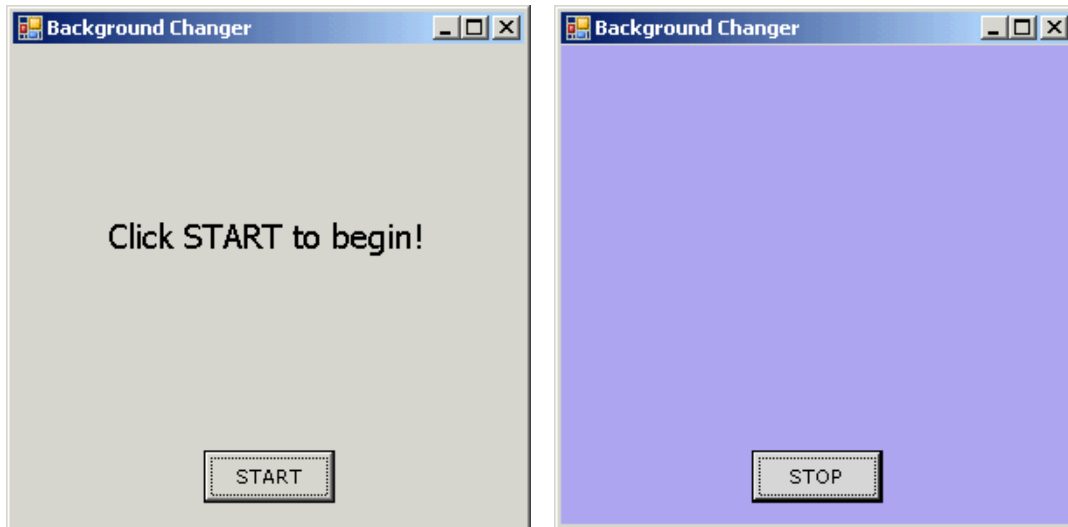
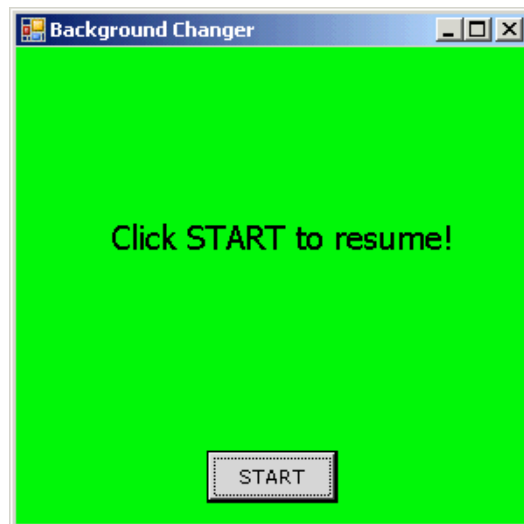


THE *TIMER* CONTROL: PROGRAMMING EXERCISES

1. Create a **Background Changer** program that changes the background colour of a form to a random colour every ½ second (or 500 milliseconds) when the user clicks the **START** button.



When the user clicks the **STOP** button the timer should stop and the program should stop changing the background colour of the form.

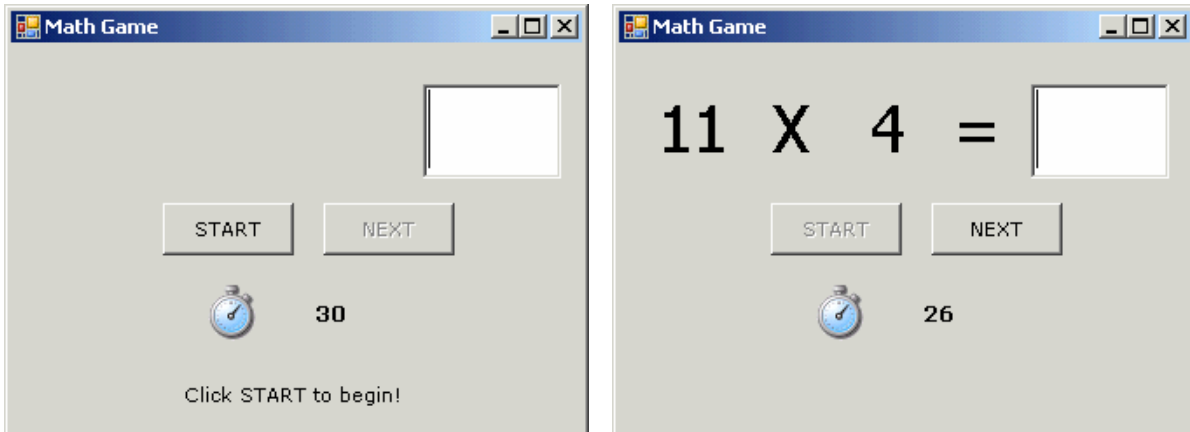


HINT: You will need to use a **Random** object and the **Color.FromArgb()** method.

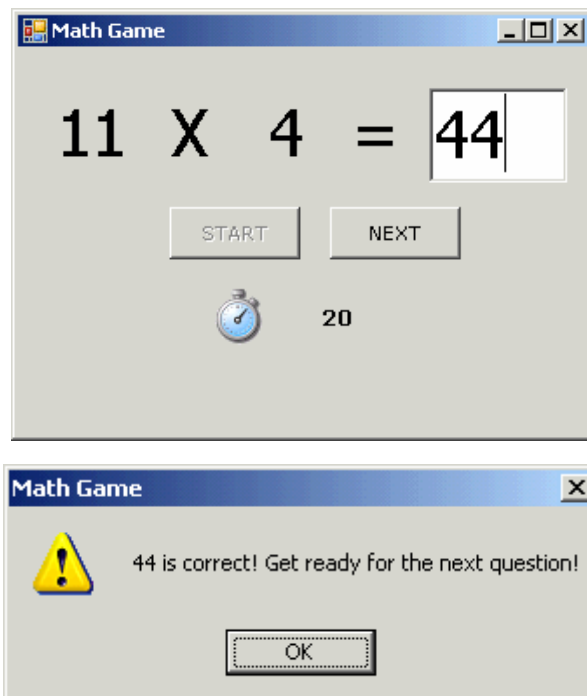
Save the program in a folder called **Background Changer** in your UNIT 5 folder.

2. Create a **Math Game** program that tests the user's multiplication skills by randomly generating two numbers between 1 and 12 and requires the user to guess the answer. The user must try to answer as many questions correctly within 30 seconds. When the 30 seconds are up, the program must calculate and output the user's result in a message box.

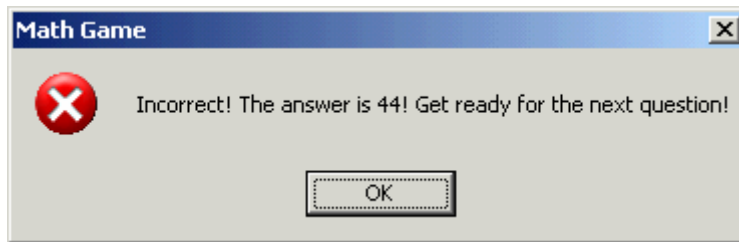
When the program starts and the user clicks the **START** button, the timer should begin and the first question should be outputted to the user:



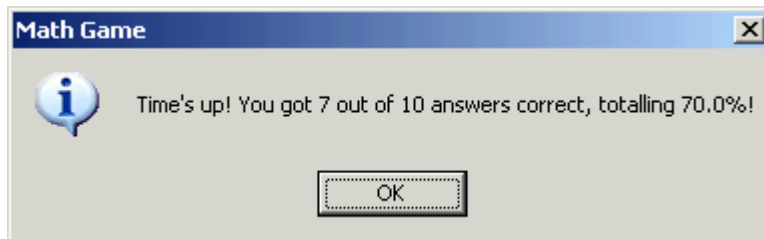
When the user inputs the correct answer and clicks the **NEXT** button, a message should be outputted indicating that the answer was correct and then the next question should be outputted when the user clicks the **OK** button.



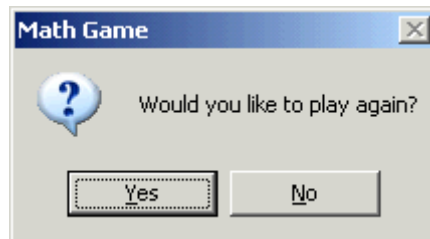
If the user enters the incorrect answer, the following message needs to be outputted:



When time is up, a message should be outputted to the user indicating that the time is up and letting the user know how they scored:



When the user clicks the **OK** button, the user should be prompted to play again.



If the user clicks **YES**, the game should restart. If the user clicks **NO**, the program should exit.

Save the program in a folder called **Math Game** in your UNIT 5 folder.