

2. Tip, Tax, and Total

Create an application that lets the user enter the food charge for a meal at a restaurant. When a button is clicked, the application should calculate and display the amount of a 15 percent tip, 7 percent sales tax, and the total of all three amounts.

3. Distance Traveled

Assuming there are no accidents or delays, the distance that a car travels down an interstate highway can be calculated with the following formula:

$$\text{Distance} = \text{Speed} \times \text{Time}$$

Create an application that allows the user to enter a car's speed in miles per hour.

The application should have buttons that display the following:

- The distance the car will travel in 5 hours
- The distance the car will travel in 8 hours
- The distance the car will travel in 12 hours

5. Celsius and Fahrenheit Temperature Converter

Assuming that C is a Celsius temperature, the following formula converts the temperature to Fahrenheit: $F = 9/5C + 32$

Assuming that F is a Fahrenheit temperature, the following formula converts the temperature to Celsius: $C = 5/9 \cdot (F - 32)$

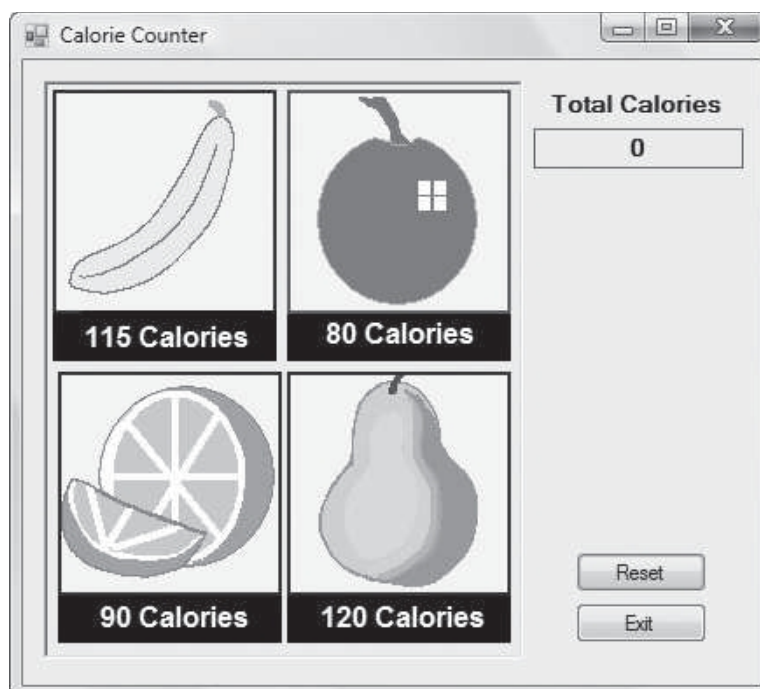
Create an application that allows the user to enter a temperature. The application should have Button controls described as follows:

- A button that reads Convert to Fahrenheit . If the user clicks this button, the application should treat the temperature that is entered as a Celsius temperature and convert it to Fahrenheit.
- A button that reads Convert to Celsius . If the user clicks this button, the application should treat the temperature that is entered as a Fahrenheit temperature, and convert it to Celsius.

10. Calorie Counter

Create an application with a form that resembles the Figure below . The PictureBox controls display the images of four fruits (a banana, an apple, an orange, and a pear) and each fruit's calories. You can find these images in the Chap03 folder of the Student Sample Programs.

When the application starts, the total calories displayed should be zero. Each time the user clicks one of the PictureBoxes, the calories for that fruit should be added to the total calories, and the total calories should be displayed. When the user clicks the Reset button, the total calories should be reset to zero.



14. Stadium Seating

There are three seating categories at an athletic stadium. For a baseball game, Class A seats cost \$15 each, Class B seats cost \$12 each, and Class C seats cost \$9 each. Create an application that allows the user to enter the number of tickets sold for each class. The application should be able to display the amount of income generated from each class of ticket sales and the total revenue generated. The application's form should resemble the one shown in below .

The screenshot shows a window titled "Stadium Seating" with a standard Windows-style title bar (minimize, maximize, close buttons). The window is divided into two main panels. The left panel, titled "Tickets Sold", contains the instruction "Enter the number of tickets sold for each class of seats." followed by three vertically stacked input fields labeled "Class A:", "Class B:", and "Class C:". The right panel, titled "Revenue Generated", contains four vertically stacked input fields labeled "Class A:", "Class B:", "Class C:", and "Total:". At the bottom of the window, there are three buttons: "Calculate Revenue", "Clear", and "Exit".