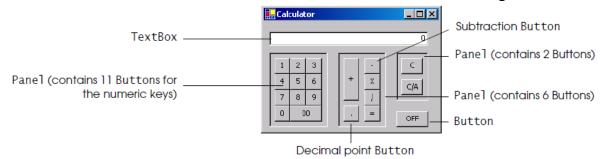
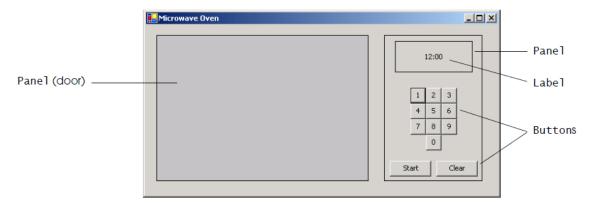
1. Calculator GUI) Create the GUI for the calculator show below using VS:



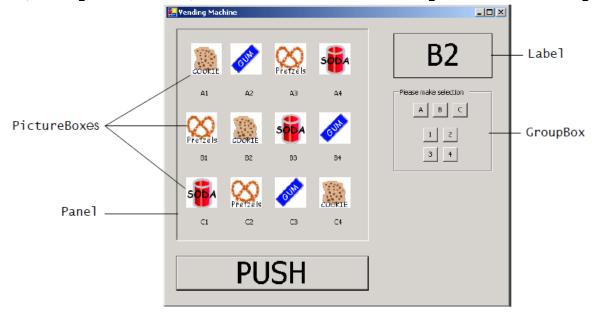
2. Alarm Clock GUI) Create the GUI for the alarm clock shown below using VS::



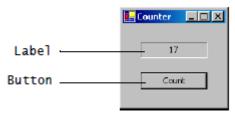
3. (Microwave Oven GUI) Create the GUI for the microwave oven shown below using VS::



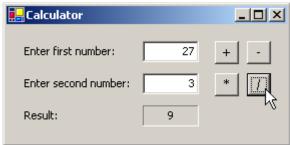
4. (Vending Machine GUI) Create the GUI for the vending machine below using VS:



5. Create a counter application (from 0 to 99) your counter application will consist of a Label and a Button on the Form. The Label initially displays 0, but, each time a user clicks the Button, the value in the Label is increased by 1. The controls are added in run time.



6. In this exercise, you will add functionality to a simple calculator application. The calculator will allow a user to enter two numbers in the Text-Boxes. There will be four Buttons—labelled +, -, / and *. When the user clicks the Button labelled as addition, subtraction, multiplication or division, the application will perform that operation on the numbers in the TextBoxes and display the result. The calculator also should clear the calculation result when the user enters new input. The following Figure displays the completed calculator. The controls are added in run time.



7. (Digit Extractor Application) Write an application that allows the user to enter a five digit number into a Textbox. The application then separates the number into its individual digits and displays each digit in a Label. The application should look and behave similarly to the following Fig. [Hint: No loop, No If]. The controls are added in run time.



- 8. Given the algebraic equation y = ax3 + 7, write window form application to display its value for an input value of x?
- 9. Write a window form application to compute the volume of a sphere. The user should be prompted to enter the radius R, and your program should calculate the volume using the formula: $V = \frac{4}{3}\pi R^3$ For pi you may use 3.1416

10. (Encryption Application) A company

transmits data over the telephone, but it is concerned that its phones could be tapped. All its data is transmitted as four-digit ints. The company has asked you to write an application that encrypts its data so that it may be transmitted more securely. Encryption is the process of transforming data for security reasons. Create a Form similar to the following Fig. Your application should read four digits entered by the user and encrypt the information as follows:

- a) Replace each digit by (the sum of that digit plus 7) modulo 10.
- b) Swap the first digit with the third, and swap the second digit with the fourth.

