

Menus

The following program, with a primitive menu, may be useful in suggesting code for the final project. A menu is a list of options. Primitive menus used numeric codes for operations. A more sophisticated version of the program below would use a GUI menu and would provide more user feedback. What is below is just a skeleton.

```
/* menu.java
   Gets user choice of arithmetic operation,
   gets operand values, executes operation.
   David Keil, 5/08   */
import java.util.Scanner;

public class menu
{
    public static void main(String[] args)
    {
        System.out.println("Hello");
        int option;
        do {
            System.out.println("1 Add\n2 Subtract\n3 Multiply\n4 Divide\n5 Quit");
            Scanner in = new Scanner(System.in);
            System.out.print("Enter operation: ");
            option = in.nextInt();
            if (option >= 1 && option <= 4)
            {
                int x1, x2;
                System.out.print("Enter 2 integers: ");
                x1 = in.nextInt();
                x2 = in.nextInt();
                System.out.print("Result is ");
                switch (option)
                {
                    case 1: System.out.println(x1 + x2); break;
                    case 2: System.out.println(x1 - x2); break;
                    case 3: System.out.println(x1 * x2); break;
                    case 4: System.out.println(x1 / x2); break;
                }
            }
            System.out.println("");
        } while (option != 5);
    }
}
```

The first box above displays the menu of options and prompts for the user's choice.

In the *switch* statement (second box), the responses to the different options are specified. The statements following the *case* labels could be replaced by method calls, as most menu-driven programs would do. For example, in the semester project, you are to implement several options on a collection of items, and each option is to be implemented by a method.