Programming Exercises – Control Flow

Several quick ones this time:

1. Write a logic chain to detect if a number is even or odd.
2. Write a function to test if user-entered values are within several different ranges, for example calculate a movie ticket price based on age.
3. Make a simple menu system where the user can enter a number or character to select an item (use a switch for this). For example:

Menu Program

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1: (O)utput some text

2: (S)ay hello world

3: (Q)uit

1. Finally, write a Boolean function to detect if a given year is a leap year – this is a bit more complicated than you’d think, as you must obey the following rules:

Every fourth year is a leap year, unless the year is a century, but it is still a leap year if it is a fourth century.

For example, year 4 is a leap year, year 100 is not, and year 400 is.