



The high IQ game (Variables, Conditionals, Loops)

The computer asks the player to type any number N lower than 10. The computer will respond with N+1 followed by the sentence "I win!". How must the computer respond if the player types 10, 11 or more? How must the computer respond if the player types 9 since he may not say 10 which is not lower than 10. Ask the player if he wants to play another game (J/N). Repeat if J. Exit if N.

Find the leap year (Variables, nested Conditionals)

The computer asks the user to type a year and figures out whether it is a leap year. In the Gregorian calendar (our current calendar) three criteria must be taken into account to identify leap years:

1. The year can be evenly divided by 4, and
2. If the year can be evenly divided by 100, it is NOT a leap year, unless;
3. The year is also evenly divisible by 400. Then it is a leap year.

This means that in the Gregorian calendar, the years 2000 and 2400 are leap years, while 1800, 1900, 2100, 2200, 2300 and 2500 are NOT leap years. Also 2016 and 2020 are leap years.