

Demo 8 / 3.11

Tasks

1. **Ville:** Run Ville web application (look: <https://trac.cc.jyu.fi/projects/ohj1/wiki/villeEn>) and carry out task round: Arrays. Scale the amount of tasks done to the range [1,0] and round the point you get with precision of 0.2. (An example: if you did 120/195 tasks (=0.615) mark 0.6 as you final point. If 140/195 (=0.72) mark 0.8.)
2. **If, switch, table:** Write 3 different functions `season(int month)` that returns the season of the month given as a parameter. One uses the `if`-clause, one uses the `switch`-clause and the third uses a table.
3. **Leap year:** Write a boolean function `leapYear(year)` that returns true if the `year` is a leap year. Leap years are those years that are divisible by four except those that are divisible by 400 (e.g. 1900 not a leap year). Think up a good test program.
- 4-5. **Dividers:** Look at the picture [dividers.png](#). It describes the divisibility of numbers so that for every `x` (integer) has a circle if the number is divisible by the corresponding `y` (integer). If a number is a prime number (divisible only by 1 and itself) it has a green line drawn on it. Write a program that draws a similar picture. Get the newest `Graphics.jar` so you can use the `Marker` object that is faster than the `Circle`. Hint: First draw a similar picture by hand and think about what you are doing.
6. **Hangman:** Alter the code of the [Hangman2.java](#) so that no actions will happen if a same letter is given again. To compile the program you need to have [Hangman.java](#) and [DrawTimber.java](#). Add another modification to make the program not case-sensitive.
- B1. Familiarize yourself with the [ComTest](#) and learn how to use it. Write your own tests and run them with tasks 2 and 3.

GURU-tasks

- G1-2. Create a version of the hangman game in which you print the phases of the gallows as text on the command line. Try to make as modifiable version as possible.