Programming in Haskell – Christmas Special

UNIZG FER, 2015/2016

Handed out: December 27, 2015. Due: January 7, 2016

Note: Define each function with the exact name specified. You can (and in most cases you should) define each function using a number of simpler functions. Unless said otherwise, a function may not cause runtime errors and must be defined for all of its input values. Use the `error` function for cases in which a function should terminate with an error message.

The Christmas homework is **not mandatory**, but it can be used as a wildcard to cover a single failed homework assignment (past or future). In order to pass this assignment you have to collect at least 10 stars, as explained in `Task 1`. Also note that this is a *pass/fail* assignment, meaning that the score you receive will not be counted towards your final score. Nevertheless, we have decided to give out some (material) prizes to a few of best submissions. Additionally, results of the Christmas homework assignment might be used to break ties when we produce a final student ranking for this academic year. We wish you the happiest of holidays and hope you'll enjoy our little Christmas surprise.

1. *(50 stars)* To solve this problem you should register at Advent of Code and read the About section.

   In short, the website hosts 25 Christmas-themed programming puzzles (one for each day of the Advent), each consisting of two parts. Each solved part earns you a star, thus completing the challenge constitues of earning a total of 50 stars. Unlike the site, we only accept solutions written in Haskell so you'll need to upload your code to Ferko as if it were a regular homework assignment.

   In order to make our lives easier during reviews, there are some restrictions regarding your code organization that you need to follow. Suppose you're solving the second part of the fifth puzzle, the function that solves that subproblem should be defined as `day05part2 :: FilePath -> IO ()`. In other words, the function should recieve a path to an input file and should output the correct answer on `stdout`. Since we expect your submissions to be quite large, we would really appreciate if you make your code well organized and thoroughly commented.