VE477
Introduction to Algorithms

Challenge 1

Manuel — UM-JI (Fall 2017)

- Improve Python coding while having fun
- No deadline
- Rewarded by a bonus on the final grade

In this challenge the goal is to solve as many riddles as possible on http://www.pythonchallenge.com.

Rules:

- Write some Python code for each riddle
- No other language than Python will be accepted
- Each time a riddle is solved take a screenshot
- For each riddle solved upload the corresponding (i) screenshot, and (ii) Python code on Canvas
- Groups sharing solutions with other groups will be no receive any bonus

Reward:

- Single: up to 2.5 extra marks on the final course grade
- Team: up to 5 extra marks on the final course grade to be shared among the team members

More specifically the bonus will be calculated as follows. We denote by r the total number of riddles and by n how many have been solved during the challenge. Let s be 2 if a group is composed of a single student and 1 otherwise. Then the bonus is determined by the function,

$$B_{r,s}(n) = \begin{cases} 0 & \text{if } n < 5; \\ \left\lfloor 100 \left(\frac{e^{\log_2 n}}{(\log^* r+1)\pi} - \frac{\pi}{2(\log^* n+1)} \right) + 0.5 \right\rfloor /200s & \text{if } n \geq 5; \end{cases}$$