

# Formal Languages and Automata Theory

## Homework 11 (Turing Machines), Due date 16.01.2018

Yulia Zinova

WiSe 2017/2018, Heinrich-Heine-Universität Düsseldorf

Design Turing machines for the following languages

**Exercise 1** (8 points)  $\{a^n b^{n+1} c^n \mid n \geq 1\}$

**Exercise 2** (8 points)  $\{ww^R \mid w \text{ is any string of } a\text{'s and } b\text{'s}\}$