| Universität Siegen | Algorithmics 2 |
| :--- | ---: |
| Lehrstuhl Theoretische Informatik | WS 2021/22 |
| Markus Lohrey |  |

## Exercise 2

## Task 1

Let $x$ and $y$ be natural numbers in binary representation. Decide in NC, whether $x<y$.

## Task 2

Let $x$ and $y$ be natural numbers in binary representation. Compute the subtraction $x-y$ in NC, where $x-y=0$ if $x<y$.

## Task 3

Compute the number of paths between two nodes in a directed acyclic graph in NC.

