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Tutorial: Powerful Data Analysis and Composition with the UNIX Shell Andreas Schmidt, Steffen Scholz

## Exercise II

## Tasks:

- Download the book 'The Adventures of Tom Sawyer' from <u>http://www.gutenberg.org/files/74/74-0.txt</u> and store it locally in a file called 'The-Adventures-of-Tom-Sawyer.txt'
- 2. Count the words and lines in the book 'The-Adventures-of-Tom-Sawyer.txt'
- 3. What does the following command perform?

egrep -o '[A-Za-z]+' The-Adventures-of-Tom-Sawyer.txt

- 4. Translate all words of 'The-Adventures-of-Tom-Sawyer.txt' into lowercase using the command tr
- 5. Count, how often each word (ignore case) in this book appears (hint: use sort, uniq).
- 6. Order the result, starting with the word with the highest frequency. Which five words appear most frequently?
- 7. If not already done: Write all the above steps in one statement (using pipes)
- 8. Compare this result with the result from the book Moby Dick: <u>http://www.gutenberg.org/files/2701/2701-0.txt</u>.

Compare the 20 most frequent words of each book. How many are in common? (hint: use head, comm, ...)