



PYTHON SEMINAR 2018

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Plan for today



1

- git

2

- Python I/O

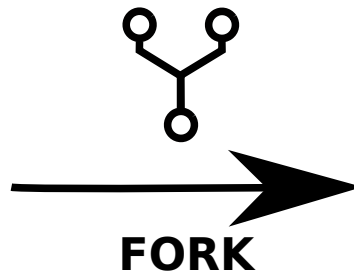
3

- pandas

4

- exercise

Remote ('upstream')
our repository



Remote ('origin')
your fork of the repository



Push and Pull
to your fork 'origin'

clone
to obtain your
local repo

Local



Fetch and Merge from 'upstream'

**you can communicate with
both remote repositories**

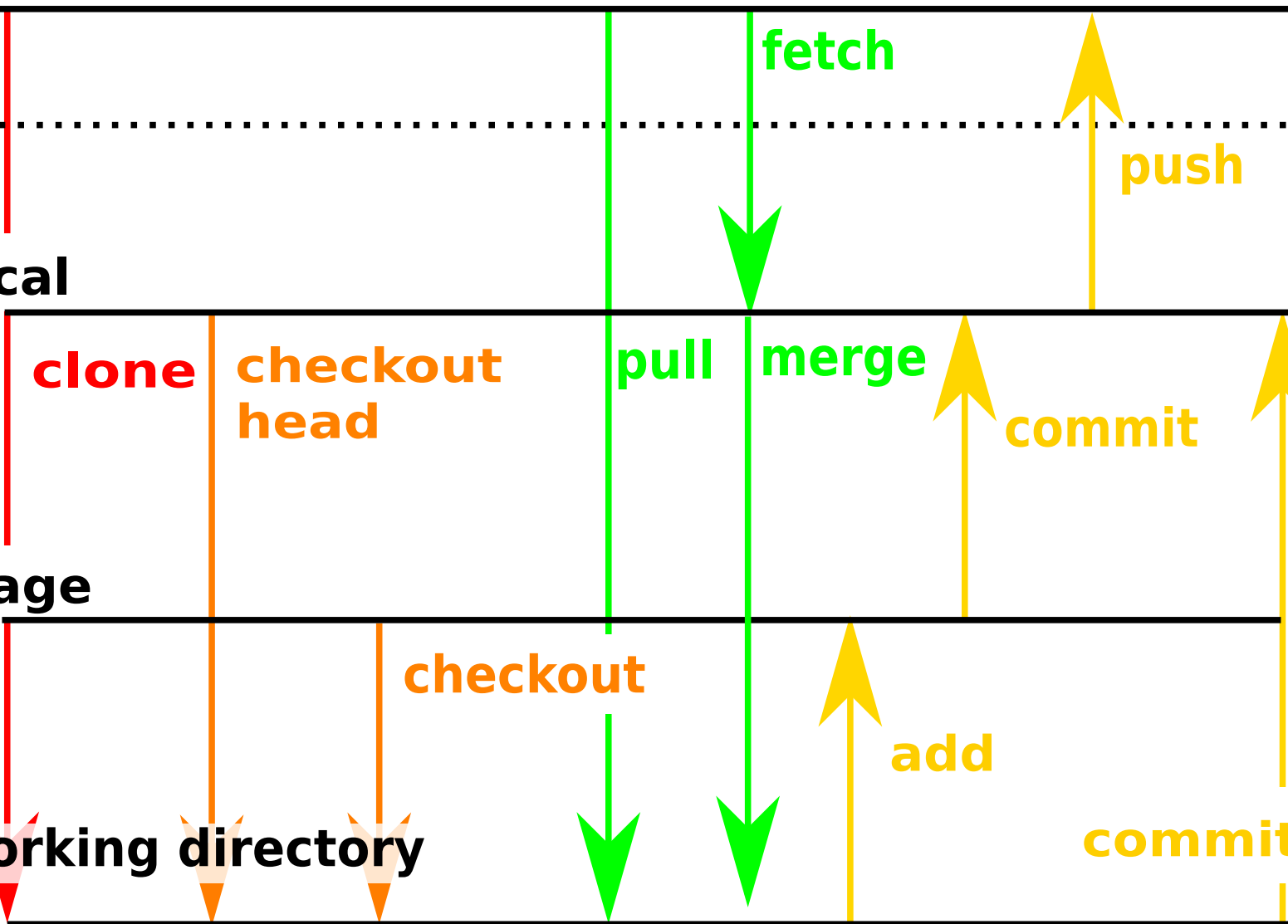
Remote

Local

Stage

Working directory

klonen aktualisieren ändern



clone

checkout
head

pull

merge

checkout

add

commit

commit -a

push

fetch

file handling

File handling operations	
Open file	<code>fo = open("path_to_file", "mode")</code>
Read a line	<code>fo.readline()</code>
Read all lines (separated)	<code>fo.readlines()</code>
Read entire file	<code>fo.read()</code>
Read 5 characters	<code>fo.read(5)</code>
Write to file	<code>fo.write("text to file")</code>
Write a list of lines to file	<code>fo.writelines(list_of_lines)</code>
Close file	<code>fo.close()</code>

pandas

Pandas commands	
Load DataFrame	<code>df = pd.load_csv('file_name')</code>
Show top/bottom of tables	<code>df.head()</code> / <code>df.tail()</code>
Call a column	<code>df['column_name']</code>
Transpose the DataFrame	<code>df.T</code>
Call an entry by name	<code>df.loc['index_name', 'column_name']</code>
Call an entry by index	<code>df.iloc[index, column]</code>
Calculate mean for columns	<code>df.mean(axis=1)</code>