

# Basics of Programming

Summer School 2024

5 – 9 August



**Utrecht  
University**



**DATA SCHOOL**

## Exploring Culture through Data: Digital methods & Data practices

Time	Monday Data in concept	Tuesday Python	Wednesday Data collection	Thursday Data analysis	Friday Final group assignment
08:00					
09:00	<b>Introduction by the team</b> <i>Data School</i> 09:00 - 10:00	<b>Basics of programming (1/2)</b> <i>Digital Humanities Workspace</i> 09:00 - 12:00	<b>Data collection (1/2)</b> <i>Digital Humanities Workspace</i> 09:00 - 11:30	<b>Text analysis</b> <i>Digital Humanities Workspace</i> 09:00 - 12:00	<b>Group assignment</b> <i>Digital Humanities Workspace</i> 09:00 - 12:00
10:00	<b>Thinking In Data</b> <a href="#">Dennis Nguyen</a> <i>Data School</i> 10:00 - 12:00				
11:00					
12:00	<b>Lunch break</b> <i>Data School</i> 12:00 - 13:00	<b>Lunch break</b> <i>Data School</i> 12:00 - 13:00	<b>Lunch break</b> <i>Data School</i> 11:30 - 12:30	<b>Lunch break</b> <i>Data School</i> 12:00 - 13:00	<b>Lunch break</b> <i>Data School</i> 12:00 - 13:00
13:00	<b>Introduction round &amp; course overview</b> <i>Digital Humanities Workspace</i> 13:00 - 14:30	<b>Data Journalism</b> <a href="#">Hay Kranen</a> <i>Digital Humanities Workspace</i> 13:00 - 14:30	<b>Data Ethics</b> <a href="#">Julia Straatman</a> <i>Digital Humanities Workspace</i> 12:30 - 14:30	<b>Data visualization</b> <i>Digital Humanities Workspace</i> 13:00 - 15:00	<b>Group assignment</b> <i>Digital Humanities Workspace</i> 13:00 - 15:00
14:00					
15:00	<b>Break</b> 14:30 - 15:00	<b>Break</b> 14:30 - 15:00	<b>Break</b> 14:30 - 15:00		
16:00	<b>Group assignment</b> <i>Digital Humanities Workspace</i> 15:00 - 16:30	<b>Basics of programming (2/2)</b> <i>Digital Humanities Workspace</i> 15:00 - 17:00	<b>Data collection (2/2)</b> <i>Digital Humanities Workspace</i> 15:00 - 17:00	<b>Break</b> 15:00 - 15:30	<b>Break</b> 15:00 - 15:30
17:00				<b>Group assignment</b> <i>Digital Humanities Workspace</i> 15:30 - 17:00	<b>Presentations</b> <i>Digital Humanities Workspace</i> 15:30 - 16:30
18:00		<b>Drinks</b> <i>Café de Bastaard</i> 17:30 - ??:??			

### Color legend

Data School team

Guest lecture

Drinks

Break

Group project

### Location

[Data School](#)

[Digital Humanities Workspace](#)

[Café de Bastaard](#)

# Schedule

## Programming block 1:

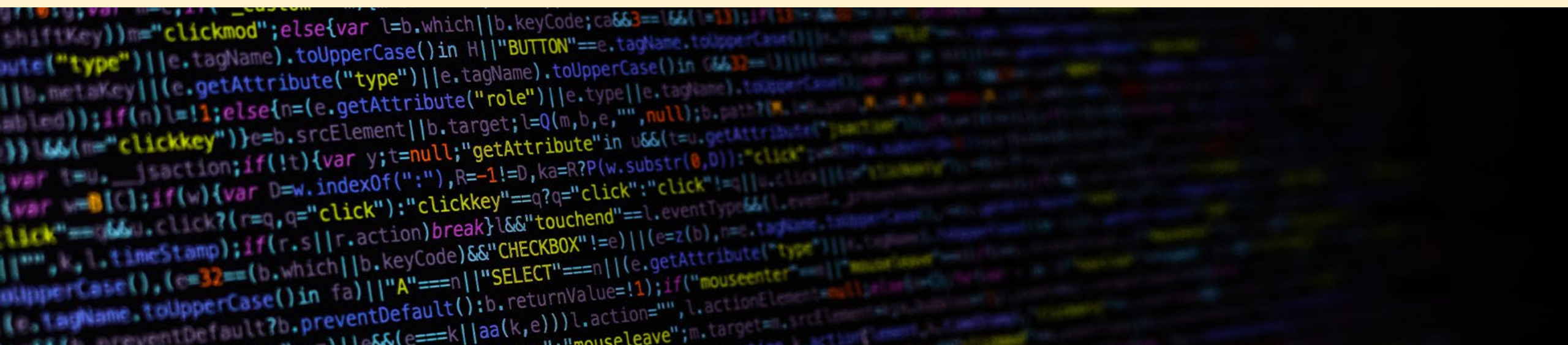
- Introduction
- Discussing preparation materials
- Foundations of syntax

## Programming block 2:

- Pandas DataFrames
- Your turn: exercises

# Introduction – what is programming?

- Creating instructions for a computer to follow
- How do you communicate?
  - With **code** that adheres to **syntax**



# Introduction – why Python?

- Easy to learn, use, and read
- Versatility
- Active community, open source
- Central to Digital Humanities



# Code walkthrough!

- Open ``01_preparation.ipynb`` in Jupyter Lab



# Code walkthrough

- GitHub account?
- Go to Teams > General > Files > Materials
- Download the materials for today
- Open `2a\_syntax\_foundations` in Jupyter Lab

# Break