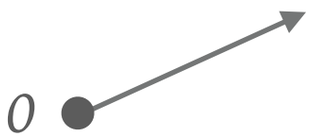
DATA TYPES

Tutorial #2

DATA TYPES

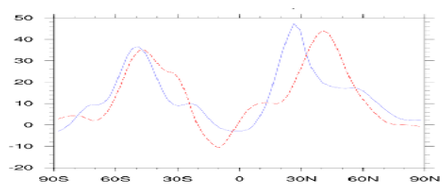
x categories

ranked categories



continuous with a 0

any number



nominal

ordinal

interval

continuous/ratio

DATA TYPES

- Where was your starting point this morning in relation to this class room (N,S,W,E)?
- What distance did you travel to get here? write down the km.
- How are you feeling this morning?
- How did you get here? on foot, bike, car, train, other

nominal (circular)

interval

ordinal

nominal

DATA TYPES AND BASIC TESTS

nominal

ordinal

interval

ratio

} *grouped together for tests*

continuous

DATA TYPES AND BASIC TESTS

	nominal	ordinal	continuous
nominal			
ordinal			
continuous			

→ *In the coming sessions, we'll basically just fill this table.*

WHAT'S DATA?

ID	Space	Food eaten (in kg/day)
1	large	20
2	small	17
3	large	21
4	large	19
5	large	23
6	small	18
7	large	22
8	small	15
9	small	16
10	small	15

data = many columns with different data types

GUESS THE DATA TYPE

1. weight of 230 chickens
2. spam mail or not
3. # of words in an email
4. height of trees on the campus
5. size in clothing
6. liters of coffee German students drink per day
7. number of flipchart markers in this classroom
8. mm of precipitation per year in Lüneburg
9. is a course in English or not
10. grades at Leuphana
11. type of room you're renting

ID	Spam	#words	…
1	0	120	…
2	1	15	…
3	1	30	…
4	0	11	…
5	1	32	…
6	1	27	…
7	0	219	…
8	0	72	…
9	0	89	…
10	0	254	…

GUESS THE DATA TYPE

12. survived the Titanic

13. number of rooms at Leuphana

14. temperature over one year

15. *change* in temperature over one year

16. wrong/false

17. speed of driving in km/h

18. your level at Phase 10

19. different types of dishes at Peter Pane

20. is a person vegan or not

21. is a person vegan, vegetarian or eats meat

22.cups of coffee German students drink per day

GUESS THE DATA TYPE

23. your # of bike trips last year

24. km of your bike trips last year

25. what would be a *nominal* example related to your bike trips?

26. whether or not the police stopped you during each bike trip

27. number of times the police stopped you during all your bike trips

28. € you paid to the police due to your excessive biking last year

29. educational level (High School/Bachelor/Master/PhD etc.)

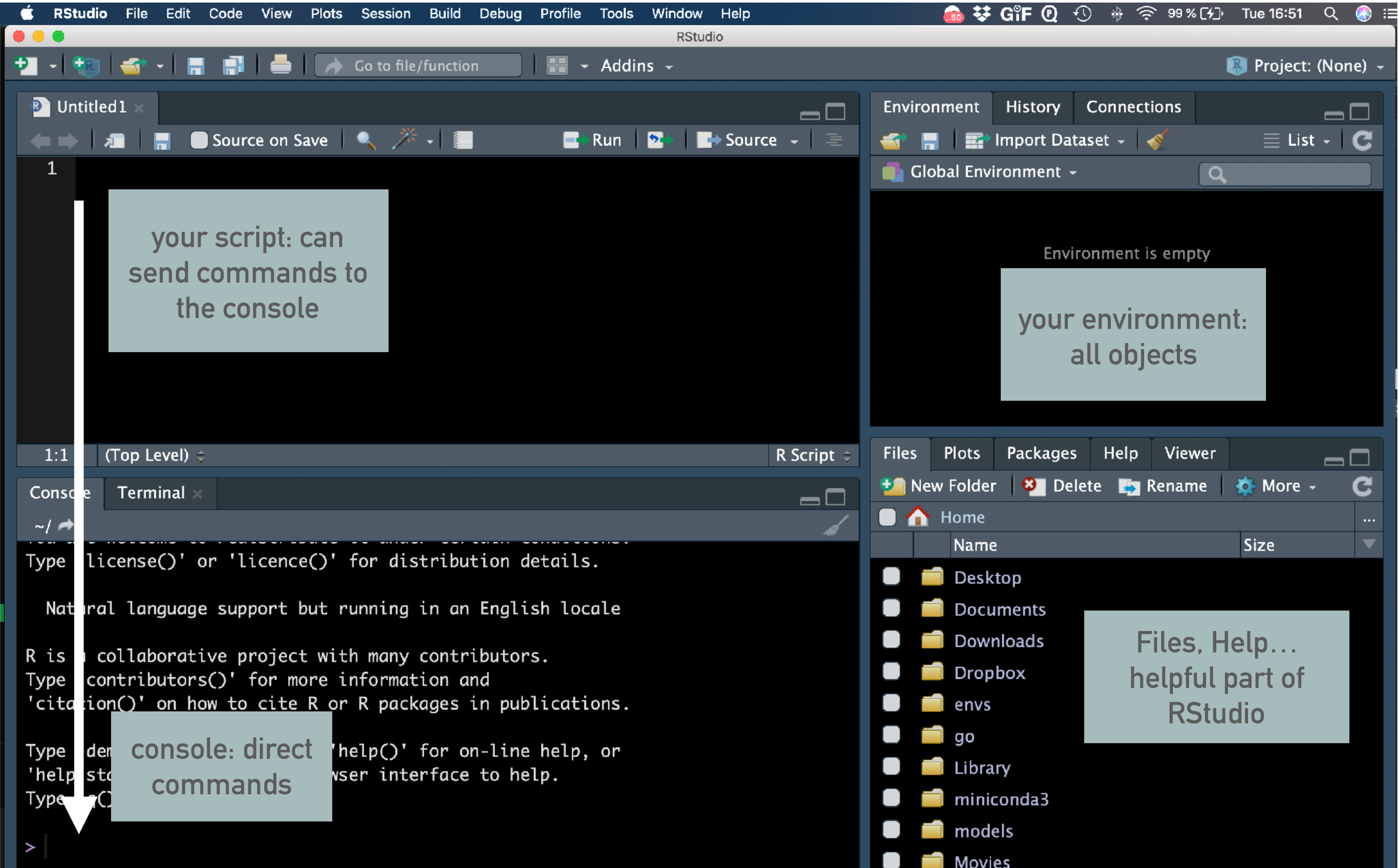
30. your age

31. different types of tests in statistics

32. our names

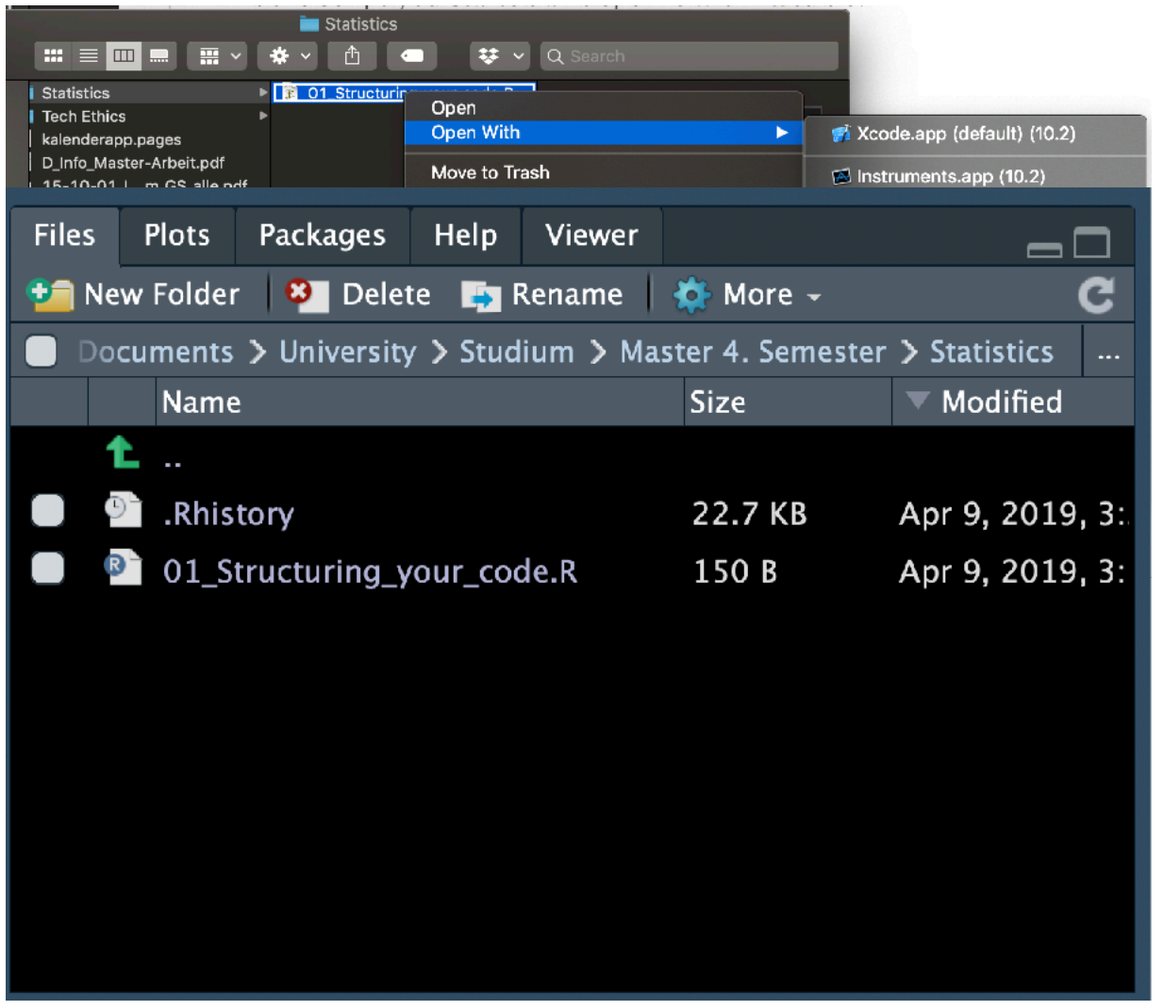
33. your IP address

TIME TO DO SOME R!



TIME TO DO SOME R!

- Close R again.
- Find the script you started and open it with RStudio.
- The folder in the left bottom corner is the same folder, you don't have to "set your working directory".



MONA CHALABI: "BAD STATISTICS"

- We'll watch a video and you should write down the following things:
  - What types of data does she mention?
  - What criteria does she mention for "bad statistics"?

UNTIL NEXT TIME

- Install the package swirl
  - `install.packages("packagename")`
  - `library(swirl)`
- Get ahold of the course "1: R Programming" and do
  - lesson "1: Base Building Blocks" and
  - lesson "2: Workspace and Files"

SOURCES

- Thermometer by Yeoul Kwon from the Noun Project

Next time: **Distributions**

- See you there!