## Introduction to Python for Economists

Homework: User input

We want to write an automatic dialog system program. In the program you can type in a question, and the system returns an answer. As a starting point use the code of Slide 5 from Session 3.<sup>1</sup> And then do the following steps:

- Import the function 'randint' from the standard library by writing in the first line of your code: from random import randint
- Change the prompt to "Please ask me a question."
- Delete the line print message and write an if...elif...else block instead that checks the input String for the following things:
  - if the last character is not an '?' or the String is shorter than 9 characters, print the answer: "This is not a question."
  - elif the String starts with "How old", "How many" or "How often", return a random number between 0 and 100 by using the imported function randint(min, max)
  - elif the String starts with "How", print the answer "Just fine."
  - **elif** the String starts with "Where", print the answer "Munich"
  - the final  ${\bf else}$  block prints the answer "I have no idea."
- change the 'How'-block by returning a random item from a list that contains "Not so good", "Just fine", "Terrific!", and "It couldn't be better:)" (Hint: compute a random index value first by using randint() with min=0 and max=the length of the list minus 1)
- change the 'Where'-block by returning a random item from a list that contains multiple different locations (cities, countries, other places)
- Add another elif block that check for the String starting with "Do you" and returns randomly 'Yes' or 'No'

<sup>&</sup>lt;sup>1</sup>Note that for testing and running your program, you have to save the file and start it from the terminal as described on Slide 8 from Session 1.