Ali Ahari

Python

A Brief Introduction

Who am I?

- Ali Ahari
  - B.Sc. & M.Sc. Sharif University of Technology
  - Phd. student at University of Tübingen
  - Currently working at Forschungszentrum Informatik FZI
- Email: ahari@mailbox.org
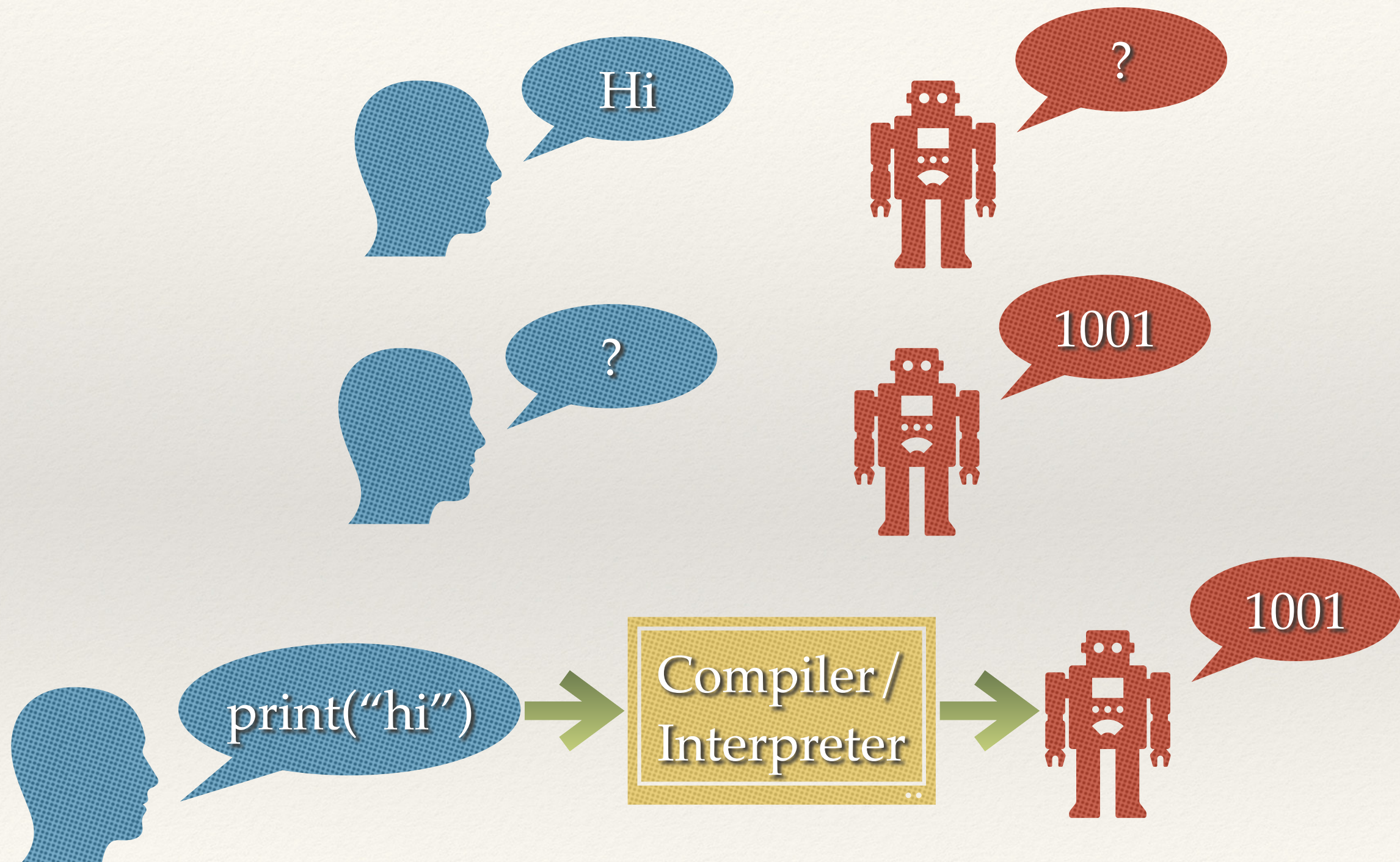- Complementary course: https://classroom.udacity.com/courses/ud1110

Who are you?

❖ Introduce yourself!

  ❖ Name

  ❖ Occupation

  ❖ Why are you here!?

What is a programming language?

Compiler vs. Interpreter

< source code>

A

Interpreter

Compiler

B

< binary code>

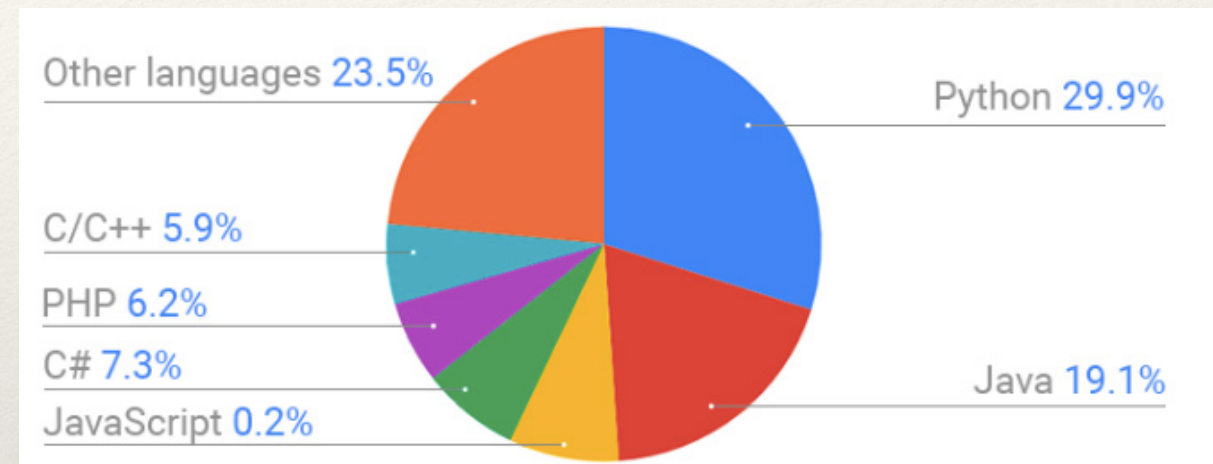| Compiler	Interpreter
Optimizes the code	Runs code line by line
Slow compile, Fast runtime	Slow runtime
C/C++, Scala	Python, Ruby, Perl
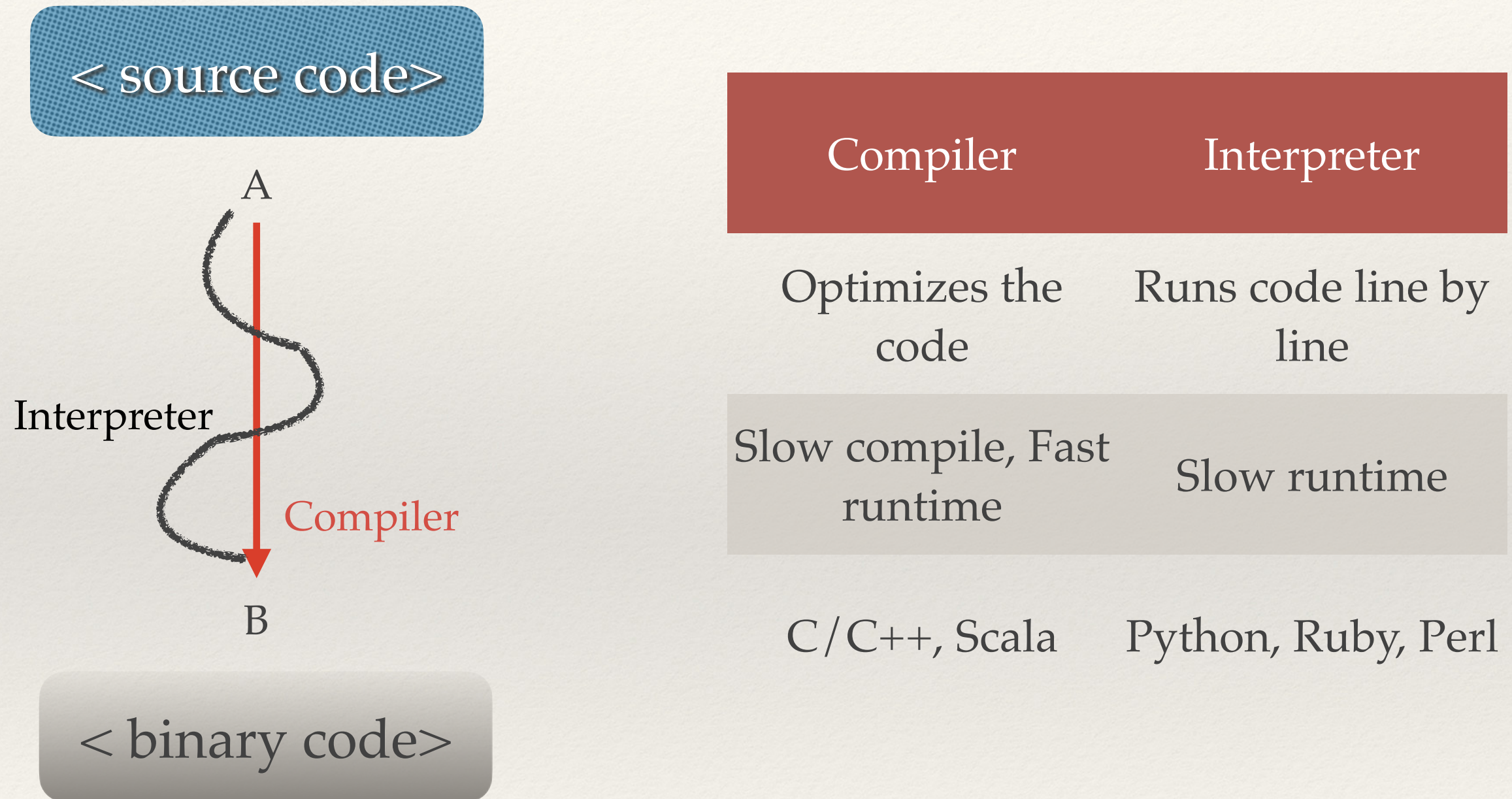
What is Python?

- Python is an *interpreted* programming language

- Python comes in two flavors:

  - Python 2 (end of life: 2.7)

    - deprecated since January 2020

  - Python 3 (currently 3.8)

    - Not backward compatible!

    - We are going to use Python 3

Other languages **23.5%**

C/C++ **5.9%**

PHP **6.2%**

C# **7.3%**

JavaScript **0.2%**

Python **29.9%**

Java **19.1%**

What you need for this class?

❖ A Python Interpreter!

  ❖ By default available on Linux & Mac

  ❖ On windows install Anaconda (https://www.anaconda.com/products/individual)

❖ A Git Client (optional):

  ❖ By default available on Linux & Mac

  ❖ Use Tortoise for Windows (https://tortoisegit.org/download)

❖ No Laptop/PC:

  ❖ Use an online interpreter: https://repl.it/languages/python3

How to access course material?

❖ You can access all course materials (slides, source codes, …) through the git repository:

   ❖ https://github.com/aliahari/python-lecture

❖ Register on github.com

❖ git clone https://github.com/aliahari/python-lecture.git

❖ Each week get the latest updates: git pull

Homework

❖ Define a personal project for yourself

❖ Send me the name of the charity and the amount that you are willing to pay for your missed classes