Which software to use for what?

Zoom: live contact sessions (recordings posted on Moodle)

Teams:
- Q&A during live sessions
- Group chat with your lab demonstrator and tutor
- General Q&A about the course
- Announcements

Moodle:
- Access to slides and videos (and code, after the live session)
- Download lab assignment specification, upload solutions

Microsoft Stream:
- Videos are posted there (linked to Moodle)

Lab logistics again (1)

You should already have been added to a small group chat on Teams, led by a **demonstrator**

Before your timetabled lab session

- Read the lab specification (Lab 1 is available now on Moodle)
- Start working on the tasks

During your timetabled lab session

- The **demonstrator** will take attendance at the start of the chat
- **Demonstrator** will answer any questions you might have – possibly sharing code
- **Tutor** will visit each group in turn, or on demand

Lab logistics again (2)

After your session

- Finish your lab solution
- Submit your solution through Moodle
- **Tutor** will mark (1—5 scale) and return feedback within 1-2 weeks

IMPORTANT NOTE

- Your lab number may have changed on MyCampus (please check!)
- Your lab time should be the same though
- JP2 time slots are now one hour long

Recap of today's content

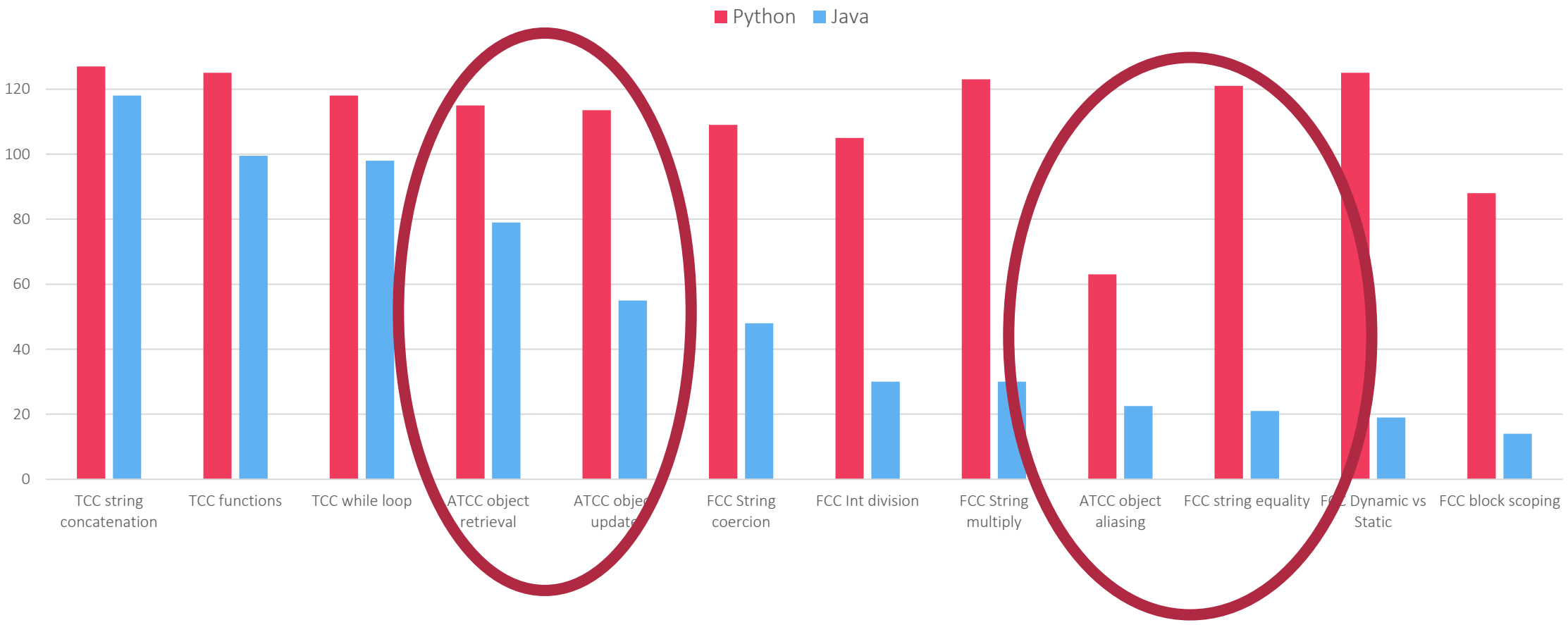
Arrays

- What is an array
- Array declaration
- Array initialization
- Accessing array elements
- Looping through an array

Non-primitive types

- What are they?
- Reference semantics
- Comparisons (equality, etc)

Relevant topics on the survey



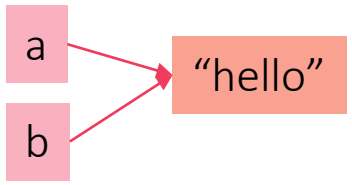
Reference semantics (also in slides)

Primitive types: program stores **actual value**

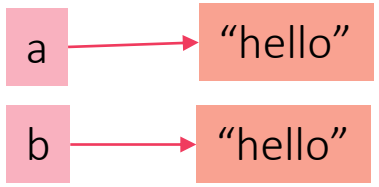
Non-primitive types: program stores **reference to the value**

E.g., Strings in Python and Java (from survey):

```
a = “hello”
b = “hello”
print (a == b)
```




```
String a = new String(“hello”);
String b = new String(“hello”);
System.out.println (a == b);
```



Survey example (Python)

```
x = {'name':'Joseph', 'age': 51}
y = {'name':'Vic', 'age': 35}
print(x['age’])


y=x
x['age']=x['age']+1
print(x['age'])


print(y['age'])
```