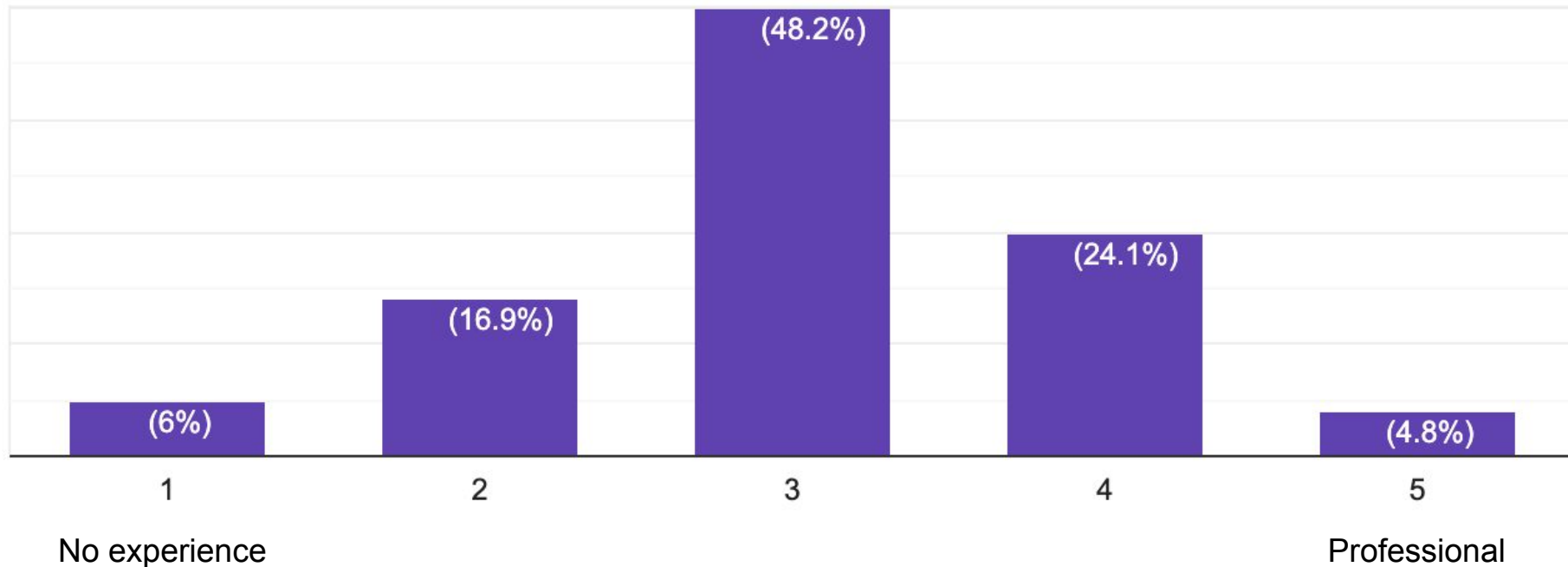# Python and Jupyter

02807 Computational Tools for Data Science
Week 2

Today

- Running Jupyter in Docker
- Python highlights (lists, dicts, generators, NumPy)
- Data exploration and data preparation in Jupyter (Markdown and Pandas)

How experienced are you with Python?

Why Python?

- Easy to get setup (and free)
- Readability and write less
- Interactive (Jupyter, REPL)
- Large community (documentation, how-tos, support, packages)
- Used for many things (data science, automation, in production)

Python vs Java

```python
stuff = ["Hello, World!", "Hi there, Everyone!", 6]
for i in stuff:
    print(i)
```

```java
public class Test {
    public static void main(String args[]) {
        String array[] = {"Hello, World", "Hi there, Everyone", "6"};
        for (String i : array) {
          System.out.println(i);
        }
    }
}
```

Jupyter notebooks

- Create documented and reproducible research