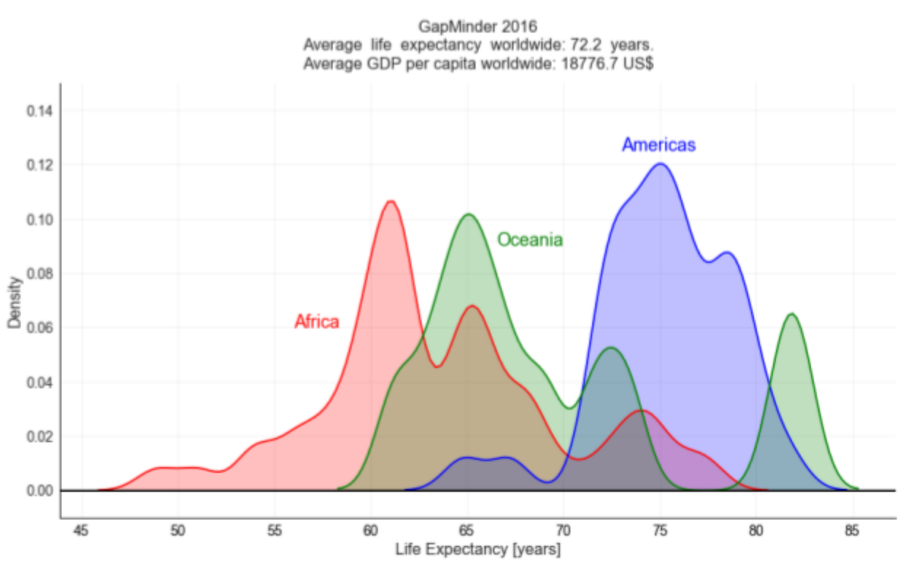
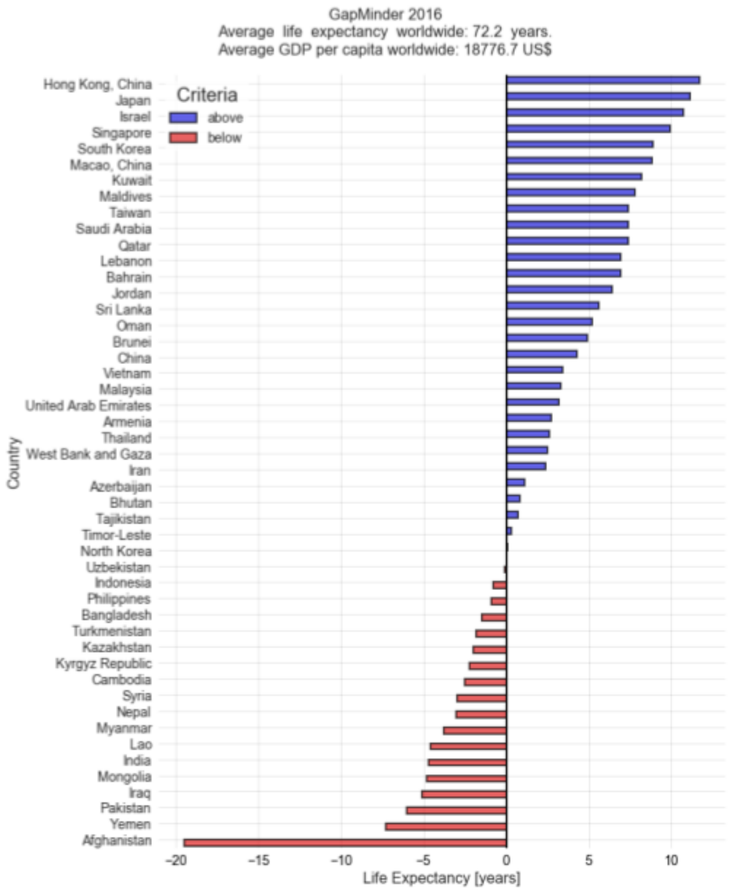
Intermediate to Advanced Programming in Python

1 day | Prerequisites (see below) | At your campus | $ No cost to members

```
# Group data by sex
grouped_df = surveys_df.groupby('sex')
#Calculate basic statistics for the groupdata by sex
grouped_df.describe()
grouped_df.mean()
```

	record_id	month	day	year	plot_id
sex					
F	18036.412046	6.583047	16.007138	1990.644997	11.440854
M	17754.835601	6.392668	16.184286	1990.480401	11.098282





Why do this course?

Python has deservedly become a popular language for scientific computing. It has all the friendly features and conveniences you'd expect of a modern programming language, and also a rich set of libraries for working with data.

We teach using Jupyter notebooks, which allow program code, results, visualisations and documentation to be blended seamlessly.

Join us for this live coding workshop where we write programs that produce results, using the researcher-focused training modules from the highly regarded Software Carpentry Foundation (http://www.datacarpentry.org/).

You'll learn:

- Advanced programming concepts and techniques in Python.
- Dataframes in Python using the Pandas library.
- Visualisation in Python using the Seaborn and the Matplotlib libraries.
- How to blend code, output and documentation with Jupyter notebooks

Prerequisites

A good knowledge of the basic concepts and techniques in Python. Consider taking our **Introduction to Programming in Python** course to come up to speed beforehand.

The Intersect approach to training

At Intersect, we work closely with our member universities to develop and deliver training that targets the day-to-day software and technology problems that researchers face. We deliver hands-on courses in a relaxed setting with knowledgeable, helpful trainers who are themselves researchers and who know how researchers work.

Questions always welcome.

For more information visit
Learn.intersect.org.au

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