

## Python Programming challenges

1. Write a python script that finds the 5 largest files inside a directory (searching recursively in subdirs)
2. Write a python script that computes the frequency of occurrence of words in a text file (bonus point: plot [Zipf's curve](#))
3. Solve the connectivity problem (see [figure](#))
4. Implement a simulator of a Turing machine (see Roger Penrose's [chapter's on Turing machines](#))
5. Get textual data from the Internet, estimate word transition probabilities and generate random text: [http://rpubs.com/ewan\\_dunbar/206871](http://rpubs.com/ewan_dunbar/206871)