These are the links in this lecture:

* + Stanford's [Data Wrangler](http://vis.stanford.edu/wrangler/)
  + Google's [Open Refine](https://github.com/OpenRefine)
  + [Talend](https://www.talend.com/resource/data-quality-tools.html) open source data quality tools
  + [Slides](http://www.libvolume8.xyz/textile/btech/semester3/yarnmanufacture1/studyofvariousqualitycontrolstudiessuchaswrappingprocedure/studyofvariousqualitycontrolstudiessuchaswrappingprocedurepresentation2.pdf) from Ted Johnson's SIGMOD 2003 Tutorial

Data quality is provided through data cleaning, also known as data wrangling. There are many tools for cleaning data, including:

* Stanford's [Data Wrangler](http://vis.stanford.edu/wrangler/) is an interactive tool for data cleaning and transformation.
* Google's [Open Refine](https://github.com/OpenRefine) tool is a free, open source power tool for working with messy data and improving it.
* [Talend](https://www.talend.com/resource/data-quality-tools.html) provides several open source data quality tools.

These are the [slides](http://www.libvolume8.xyz/textile/btech/semester3/yarnmanufacture1/studyofvariousqualitycontrolstudiessuchaswrappingprocedure/studyofvariousqualitycontrolstudiessuchaswrappingprocedurepresentation2.pdf) from Ted Johnson's SIGMOD 2003 Tutorial.