



UCL Department of Computer Science  
CS M038/GZ06: Mobile and Cloud Computing  
2011–2012, Term 2  
Kyle Jamieson and Brad Karp

**One-pager: MapReduce (Dean and Ghemawat, 2004)    Due: Start of lecture, 31<sup>st</sup> January 2012**

*Instructions: in your own words, answer the following question as **succinctly** as possible (in 200–500 words, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is categorically prohibited.*

Trace the flow of data at each step of a MapReduce computation. For the input files, and every step of the MapReduce computation, describe *a*) where the data is physically, *b*) what filesystem contains the data, and *c*) all the mechanisms MapReduce uses to move data closer to the consumer of the data.