Potential projects

1. Incorporate anything we've learned into your research. Do in consultation with me.

2. Read a paper and

   (a) reproduce results.

   (b) presentation will give main ideas to class.

   Here are some papers that are possibilities, but you can (and should!) search out things that are of interest to you!

   - Mike Giles' Smokin'Adjoints paper: `https://www0.gsb.columbia.edu/faculty/pglasserman/Other/RiskJan2006.pdf`
   - Anything related to MLMC. See Mike Giles's webpage: `https://people.maths.ox.ac.uk/gilesm/mlmc_community.html` for MLMC being used worldwide.

3. Explain something I am leaving out (because I don't know the details) to the class. Like: why does the delta method work? How good is it?

4. What is the effect of the error in the CLT on different Monte Carlo methods?

5. Pseudo-random number generators – what are they? How do we test quality, and which ones are used?