This assignment consists of answering #1 and one other question of your choice. Since these are philosophical essays, attention should be paid to clarifying key concepts. Each question should be approximately 1½ - 2 pages.

1. What's the difference between weak and strong severity? (14, 23). You might wish to give an example of each from Excursion 1, or discuss key concepts such as: linked vs convergent arguments, arguing from coincidence, arguing from error.

**Extra Credit for question #1: Choose one:**
(i) Although one could stop after weak severity, the severe tester accepts strong severity as well. Why?
(ii) While an ultra-skeptic can always invent “rigged” hypotheses, how might this be criticized using weak severity alone?

2. Explain the Likelihood Principle in contrast to Error statistical Principles. Why does Cox say that optional stopping violates the Weak Repeated Sampling principle? What’s your current intuition about this highly controversial issue? Why?

3. Explain the classic problem of justifying induction as discussed in Excursion 2 Tour I.

4. Bayesian confirmation (Bayesian epistemology). Discuss as you wish.
   - What is Bayes’ theorem?
   - What is “confirmation” on the Bayesian account?
   - What is the problem of irrelevant conjunction (tacking paradox)?
   - What is the argument (Glymour) that if \( x \) confirms some hypothesis \( H \), then \( x \) confirms any \( J \)?