Please answer the questions below as fully and completely as you can. Turn in your written answers in class during the next class meeting. As part of this exercise set, you must read the following.

- Ch. 7, A Gift of Fire: Evaluating and Controlling Technology

1. Pick three different software-related technologies and brainstorm what the technical code is for each. A software-related technology could be a software application or platform (e.g., Twitter, Amazon, Facebook, Bitcoin, etc.) or a physical device largely driven by software (e.g., a smartphone, autonomous vehicles, the Internet of Things, robotics, etc.). With respect to the technical code, describe both: (a) the explicit values and assumptions based directly on design features; and (b) the implicit values and assumptions (that may not be intentional).

Software Application 1: ____________________________
(a).

(b).

Software Application 2: ____________________________
(a).

(b).

Software Application 3: ____________________________
(a).

(b).
2. For one of the software applications you selected in Question 1, brainstorm the following regarding its societal impact. As you do these, exercise your “moral imagination” (i.e., really try to imagine what it will be like for different users of the technology).

(a). What changes are created by the technology (e.g., way of life, culture, community, politics, environment, health, economics, fears and aspirations)? Provide details.

(b). Who is impacted by the technology (e.g., individuals, organizations, parts of society; and are the impacts local, national, global)? Provide details.
(c). What are the negative and positive impacts and their trade-offs?

3. For the technology in Question 2, thinking again about the technical code, how could the application change people’s thoughts and behavior regarding the features of the design. That is, what types of thoughts, behaviors, values, etc., could become “locked in” by the application. Extrapolate about the future implications/impacts of these items becoming “locked in”.