Homework Assignment 7

1. (10 points) You have been asked to perform a similar exercise for a secret government organization. List overt and covert uses of the card, list data that need to be broadcast, and identify potential misuses of the data.
2. (10 points) If you were supplying electronic voting machines for an election, what could you do to violate individuals' privacy rights? That is, suggest some not readily apparent ways you could rig the machines to make it possible to determine after the election who had voted for which candidates.
3. (20 points) Suppose a telephone company maintained records on every telephone call it handled, showing the calling phone number; the called phone number; and the time, date, and duration of the call. What uses might the telephone company make of those records? What uses might commercial marketers make? What uses might a rival telephone company make? What uses might a government make? Which of those uses violate individuals' privacy rights?
4. (10 points) Identify the three most probable threats to a personal computing system in an office with fewer than ten employees. That is, identify the three vulnerabilities most likely to be exploited. Estimate the number of times each vulnerability is exploited per year; justify your estimate.
5. (10 points) Investigate your university's or employer's security plan to determine whether its security requirements meet all the conditions listed in this chapter. List any that do not. When was the plan written? When was it last reviewed and updated?
6. (10 points) When is an incident over? That is, what factors influence whether to continue the work of the incident handling team or to disband it?
7. (10 points) List five kinds of harm that could occur to your own personal computer. Estimate the likelihood of each, expressed in number of times per year (number of times could be a fraction, for example, 1/2 means could be expected to happen once every two years). Estimate the monetary loss that would occur from that harm. Compute the expected annual loss from these kinds of harm.
8. (10 points) List the issues involved in the software vulnerability reporting argument. What are the technical issues? What are the psychological/sociological ones? What are the managerial ones? What are the economic ones? What are the ethical ones? Select a vulnerability reporting process that you think is appropriate and explain why it meets more requirements than any other process.
9. (10 points) Someone you know has a blog which, although not directly listed on her home page, you found by a simple search query. In her blog she writes some really explicit descriptions of a relationship with another friend of yours. Explain the ethical implications of (a) your reading the blog, (b) your telling the second friend about it, (c) your telling other friends about it, (d) your posting a link to it on your home page.