Scenario 1
Abraham is a structural designer. After constructing a new and innovative building, he finds a fault in his calculations that could result in its collapse under severe wind conditions. Such a collapse would endanger the occupants.

Abraham advises the architect and client. The architect and client agree upon remedial construction and necessary evacuation plans are developed. Both the client and architect strongly agree that the situation should be kept secret.

1. (35 points) Should Abraham disclose this information to the tenants? From Abraham’s point of view, utilize either the NSPE or the IEEE Codes of ethics and explain whether or not he is required to notify the tenants about the situation. Your answer should contain:
   a. The code of ethics chosen to analyze this situation
   b. Citations of at least two fundamental canons from the code of ethics
   c. A written defense as to how the fundamental canons apply to the case

Scenario 2
Abraham is a structural designer. After constructing a new and innovative building, he finds a fault in his calculations that could result in its collapse under severe wind conditions. Such a collapse would endanger the occupants.

Abraham advises the architect and client. The architect and client agree upon remedial construction and necessary evacuation plans are developed. Both the client and architect strongly agree that the situation should be kept secret. Abraham honors their wish for secrecy.

No sooner had the remedial construction begun when a big storm comes through the city causing severe wind conditions. The evacuation plan is followed and the building is vacated. Luckily, the building survives the storm. However, all the tenants now know about the danger of the building.

2. (35 points) As a tenant, do you feel you should have been told about the situation when it was initially discovered? Using Utilitarianism explain why you should have been told about the situation or why it didn’t really matter (after all, the building was evacuated and there was no chance of anyone being harmed). As a minimum your answer should contain:
   a. A short summary (1 paragraph) describing the principles of Utilitarianism
   b. An analysis of how Utilitarianism can be applied to this case
   c. A conclusion of the analysis (should the tenants have been told about the situation?)
Scenario 3
Abraham is a structural designer. After constructing a new and innovative building, he finds a fault in his calculations that could result in its collapse under severe wind conditions. Such a collapse would endanger the occupants.

Abraham advises the architect and the client. The architect and the client do not feel there is a problem with the design of the building. After all, the geographical region where the building is located has never experienced severe weather. They both agree there is no danger in leaving the building as it is. As a structural engineer, Abraham however believes there is a possibility of a major catastrophe. Furthermore, he knows the design falls short of generally recognized margins of safety.

3. (35 points) Describe what action(s) Abraham should take in this scenario. Use one of the codes of ethics, OR Utilitarianism to defend Abraham’s actions. As a minimum your answer should contain:
   a. The actions you believe Abraham should take
   b. The method you used to defend Abraham’s actions (Codes or Utilitarianism)
      i. Codes
         1. If a code was used, state which code, and cite at least two fundamental canons from the code.
         2. Why did you choose to analyze this case using a code of ethics instead of Utilitarianism?
         3. Include a written defense as to why you chose the canons you did and how they apply to the actions Abraham should take
      ii. Utilitarianism
         1. If Utilitarianism is used, provide an analysis as to how Utilitarianism defends Abraham’s actions (you may refer to your answer from question 2a instead of restating the principles of Utilitarianism)
         2. Why did you choose to use Utilitarianism instead of one of the codes of ethics?

Total Possible 105 points out of 100 (yes there is extra credit built into each question)