a) Develop an agile manifesto to develop a BRAC USIS.

Ans: To work in an agile environment, 4 factors need to be ensured,

1. Individuals and interactions over processes and tools. The people involved in the process of making the BRAC USIS should all be provided with proper working environments, such as quiet workplaces, room for recreation and brainstorming, avoiding pressurizing for deadlines, but at the same time ensure proper coordination with team members to allow the final product to be what all the members intended it to be.
2. Working software over comprehensive documentation. Unlike mainstream projects, agile projects do not require detailed paper-work. However, necessary documentations which the engineers will need to compliment each other’s work to ensure the final product will be there, however it will not be official or visible to anyone not intended to. What matters is the final product and not the documentations.
3. Customer collaboration over contract negotiation. Students and faculties will all be constantly collaborating with the engineers to aid in any changes or any differences in opinion or ideas. This will ensure the final product to be something everyone is satisfied with.
4. Responding to change over following a plan. People will constantly have changes in priorities and bring in new ideas. Agile follows a procedure which will always be open to changes desired by the customer or the engineers. The USIS have to be implemented in a way so that it is easily adaptable to changes.

b) Enjoy an “Introduction of Agile/XP” youtube video and comment on it.

Ans: From the video, <https://www.youtube.com/watch?v=Z9QbYZh1YXY> , named “What is agile?” by Mark Shead, I realized that different occupations have different ways to define agile and work differently. Agile is defined a set of values and principles. The speaker then talks about the 4 values and the 12 principles of agile. I found out that there are many ways to perform an agile task as there are many people involved who have to all collaborate and work together to build a final product. Agile tasks may undergo many changes and be carried out in different approaches to fit everyone’s needs and ensure maximum productivity.

c) What other refractoring activites are there?

Ans: Code refractoring should be done as a series of small changes making the code slightly better, and at the same time leaving the program in working order.

After each little step in refractoring, it should be checked for bugs to prevent the risk of introducing bugs into the working code.

Method calls should be simplified so that it is easily understandable by a new reader of the code such as: find, delete, add, remove etc.

Code should be broken into smaller pieces in a way so that it is easier to interpret.