Part 1

1. a) Benefit from business perspective: reduced costs long term
    Benefit from customer perspective: convenience
  b) Possible techniques for requirements elicitation:
    Technique 1: Observational study to observe and analyse shoppers to understand what requirements they actually need.
    Technique 2: Individual interviews with stakeholders to gather requirements based on what they want to include in the system.

2. Functional requirement 1: Shoppers can select items they want to buy and view similar items.
Functional requirement 2: Shoppers can pay using either credit or cash.
Non-functional requirement 1: Security of the payment system
Non-functional requirement 2: Reliability of the system when handling large amounts of items

3. Technique that can be used for determining validity of gathered requirements: prototyping by using an executable model of the system to check whether requirements are valid or necessary
    Technique that can be used for determining completeness of gathered requirements: Ensure that all functions required by the customer are included.

4. A domain requirement is defined as a constraint on the system from the domain of operation, explicitly the characteristics of a particular category. It may be difficult to gather domain requirements from interviews, as they may be expressed with technical terminologies that the software engineers may not be familiar with. Some stakeholders may also assume certain characteristics to be fundamental and not worth mentioning, which may cause these characteristics to be ignored during the development process.

Part 2

1. I learned about the various functional, non-functional and domain requirements that may be involved in the software development process, ways to gather these requirements, and also some limitations of such ways.

2. I used the lecture slides, findings from workshop discussions, and other various online resources to answer the questions given. For someone who has not been involved in a software development process, these resources were essential in helping me understand the process of software development.

3. I found it difficult to identify some of the requirements necessary for the automated supermarket system, as I have not given much thought to the specific tasks that have to be completed in a supermarket. Also, as mentioned above, since I have never been a part of software development, it was difficult to understand what requirements were necessary to understand for software developers. This has inspired me to think more about the processes around me in terms of the requirements necessary, which is not something I considered before.