**FAST-NUCES Assignment # 2 Introduction to Software Engineering**

**Note:** Plagiarized content will not be given any credit. Each question carries equal marks.

1. Based on your experience with a bank ATM, draw an activity diagram that models the data processing involved when a customer withdraws cash from the machine.
2. For the MHC-PMS (Mental Health Care Patient Management System), propose a set of use cases that illustrates the interactions between a doctor, who sees patients and prescribes medicine and treatments, and the MHC-PMS.
3. Draw state diagram of the control software for an automatic washing machine that has different programs for different types of clothes.