

### Exercise 1: “Purchase Train Ticket” Use Case

- Activity is started by Commuter actor who needs to buy a ticket.
- Ticket vending machine (TVM) requests trip information from the Commuter.
- TVM calculates payment due and requests payment options: cash, credit card.
- If payment by card was selected by Commuter, another actor, Bank will participate in the activity by authorizing the payment.
- TVM prints the ticket dispense change if needed to finish the transaction.

Draw an **activity diagram** showing the flow of actions from start to end.

### Exercise 2 : Draw a sequence diagram for:

Online airline reservation that handles **flight search, booking, and payment**, including different possible scenarios such as payment success, and failure.

### Exercise 3: Draw a sequence diagram for:

- Getting on a flight. Start at home, check in at the counter, go through security, and end up at the gate. (If you have time during the exercise, get yourself to your seat.)
  - You may get searched in security