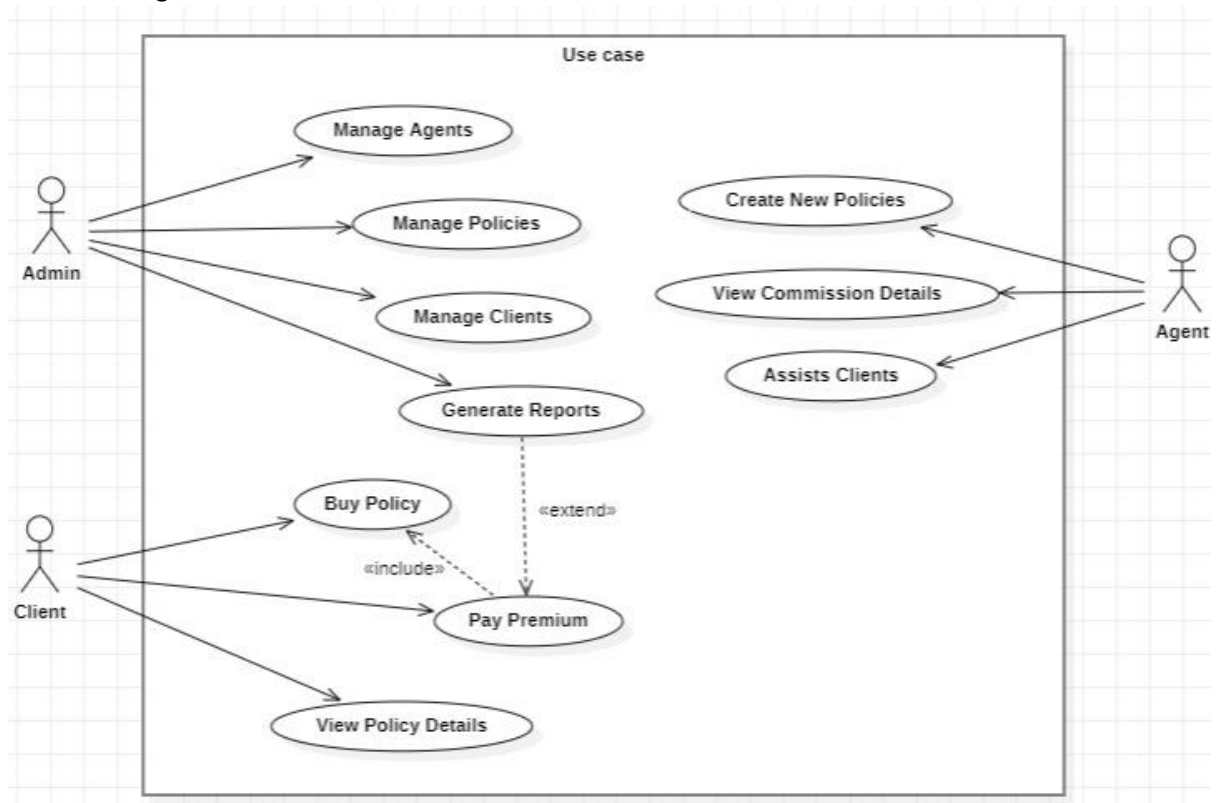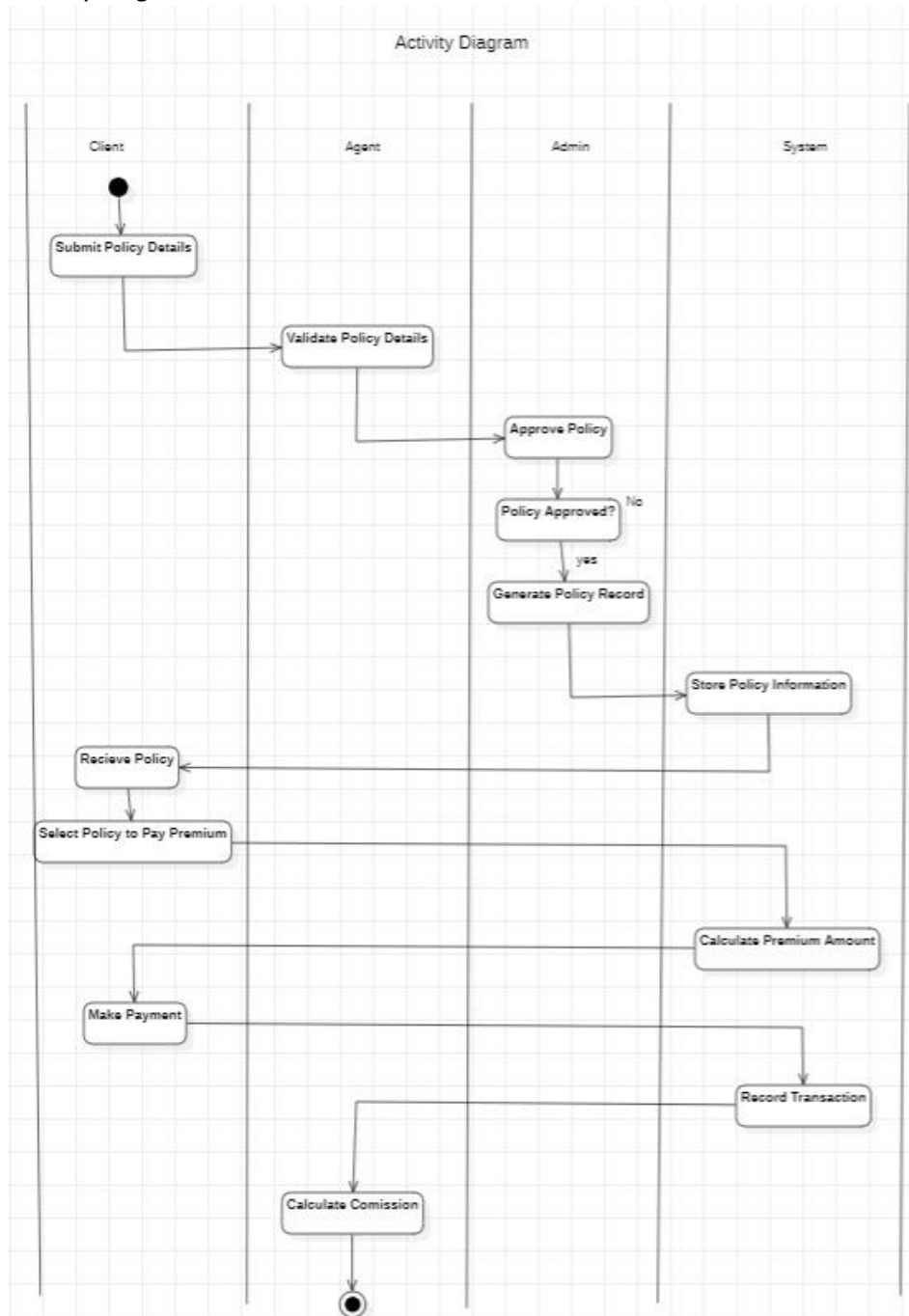# Practical No. 6

AIM: A renowned insurance company works with agent all across the country. Agent sell various policies to the client and get commission for opening new policy. Also, each time the policy holder pays the premium for that policy, the agent gets commission on that. Each policy has a premium, duration in year, rate of interest, and the commission percentage for the agent. When a new policy is created, a record is maintain storing the policy holders name, address, phone number, age, nominee(if he/she is a new client) and policy details such as policy date, maturity date, policy amount, agent name etc. Also a new transaction record is created for the payment of premium. For the above case study, draw.

1. Use case diagram

2. Activity diagram

3. List the classes used

1. Policy
   o Attributes:
      ▪ PolicyID
      ▪ PolicyName
      ▪ PremiumAmount
      ▪ Duration
      ▪ RateOfInterest
      ▪ CommissionPercentage
      ▪ PolicyDate
      ▪ MaturityDate

- o Methods:
    - calculateMaturityAmount()
    - getCommissionPercentage()
2. Client
    - o Attributes:
        - ClientID
        - Name
        - Address
        - PhoneNumber
        - Age
        - NomineeName
    - o Methods:
        - viewPolicyDetails()
        - payPremium()
3. Agent
    - o Attributes:
        - AgentID
        - Name
        - PhoneNumber
        - CommissionEarned
    - o Methods:
        - createPolicy()
        - calculateCommission()
4. Admin
    - o Attributes:
        - AdminID
        - Name
        - Email
    - o Methods:
        - manageClients()
        - manageAgents()
        - managePolicies()
5. Transaction
    - o Attributes:
        - TransactionID
        - ClientID
        - PolicyID
        - PaymentDate
        - AmountPaid
    - o Methods:
        - generateTransactionRecord()
        - calculateDueAmount()e