Week 03 Lab

🌑 **EXERCISE** *Create **MyFatherBank** program with the following specifications*

Part 1

1. The program needs to implement full encapsulation.
2. The program has to create 2 saving accounts and 2 current accounts with appropriate super class.

  Data for saving accounts

    a) AC No = 010001 Initial balance = RM2,000.00 Yearly Rate = 0.06
    b) AC No = 010002 Initial balance = RM5,000.00 Yearly Rate = 0.03

  Data for current accounts

    a) AC No = 020001 Initial balance = RM4,000.00 Overdraft = RM5,000.00
    b) AC No = 020002 Initial balance = RM10,000.00 Overdraft = RM8,000.00

3. The program needs to have deposit method.
4. Display the details of all Accounts in the main program
  Use polymorphism - method overriding.
5. Add third saving account

    AC No = 010003 Initial balance = RM1,000.00 Yearly Rate = awaiting decision
  Use polymorphism - method overloading

Part 2

1. Deposit RM200 to 010001. Deposit RM100 to 020001.
2. Withdraw RM4000 from 010001. Withdraw RM200 from 020001.
3. Withdraw RM12000 from 010002.
4. Withdraw RM12000 from 020001.
5. Withdraw RM12000 from 020002.
6. Roll the year to add interest income to 010001, 010002 and 010003.
7. Add new account facility called PowerSaving that has feature of saving account but come with emergency over the limit loan facility (EOTL).
8. Data for power saving accounts

    a) AC No = 030001 Initial balance = RM2,200.00 Yearly Rate = 0.05
    EOTL = RM3000.00

    b) AC No = 030002 Initial balance = RM1,900.00 Yearly Rate = 0.04
    EOTL = RM2000.00

9. Display the detail of PowerSaving accounts.
10. Deposit RM100 to 030002.
11. Withdraw RM5000 from 030001.
12. Withdraw RM5000 from 030002.
13. Draw full class diagram for the above solutions.