Vavuniya Campus of the University of Jaffna

Second Examination in Information Communication Technology - 2017

(Technology Stream)

First Semester - September/October 2018

TICT2134-Advanced Computer Programming (Practical)

Answer All Questions.

Time Allowed: Three hours

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1. Bank accounts can be a necessity for modern life. They are convenient, and safe and many types of bank accounts pay interests. There are some types of bank accounts: Saving Account, Current Account and Fixed Account. Generally, every bank account has basic attributes such as account number, account holder name, account balance and interest; however some accounts has special attributes, such as fixed account has maturity period. The class diagram of the above structure is given below in Figure 1 and Figure 2.

   (a) Write a program in a console application. Assume that the following structures shown in Figure 1: exists within Population namespace and Figure 2: exists within Bank_Management namespace.

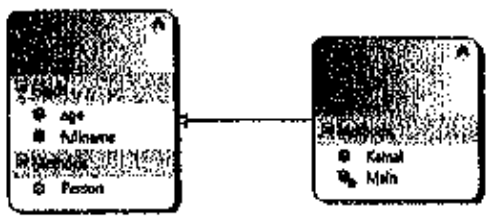

Figure 1

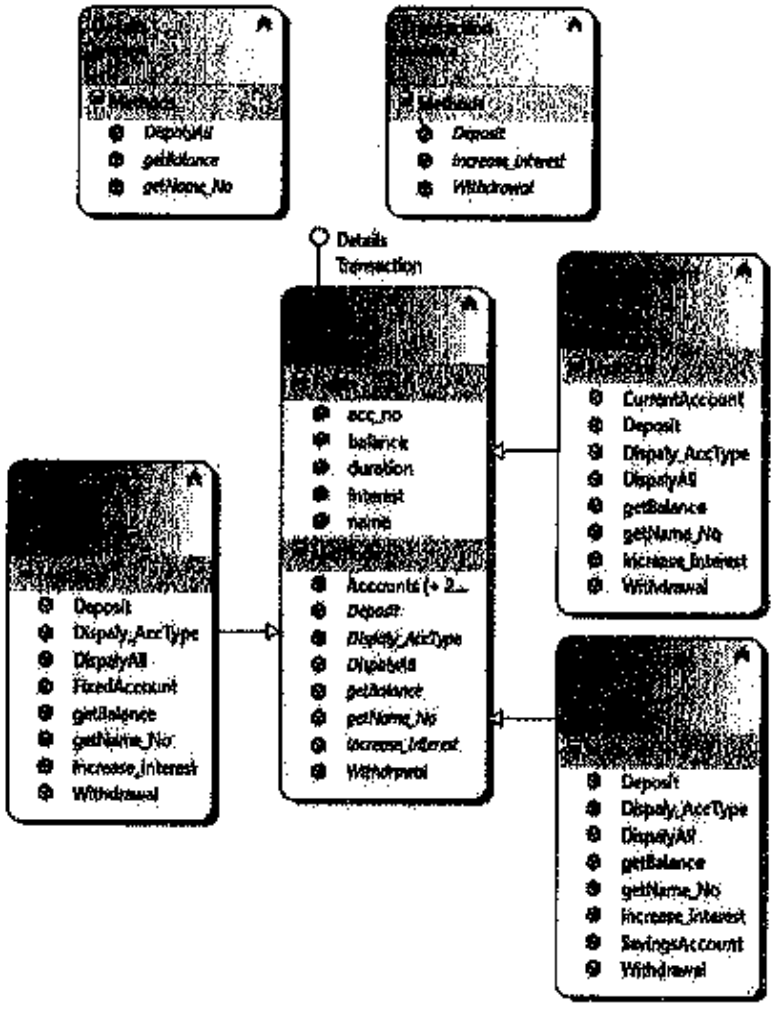

Figure 2

The Methods are:

i. DisplayAll() - to display all the details of the account.

ii. getBalance() - to return the balance.

iii. getName_No() - to return the account number with account holder's name.

iv. Deposit(amount) - to return the balance after added with the amount deposited.

v. Withdrawal(amount) - to return the balance after the withdrawal of the amount.

vi. increase_interest(interest) - to increase the interest rate.

vii. Dispaly_AccType() - to display the account type as savings or current or fixed

Note: The methods with the class name are referred to its constructors. The methods written in italic are either virtual or abstract.

(b) Create instances within the Main method in Kamal class as shown below.

```
Kamal k=new Kamal(''Rama",''Sri",26);
```

Make the constructor of Kamal to make fullname by concatenating the first name and surname.

Bank_Management.SavingsAccount sa=new Bank_Management.SavingsAccount (k.fullname, 1234567,10000.00,15);
Bank_Management.CurrentAccount ca = new Bank_Management.CurrentAccount (k.fullname, 1234567, 10000.00);
Bank_Management.FixedAccount fa = new Bank_Management.FixedAccount (k.fullname, 1234567, 10000.00,10, 15);
Write your program to output as shown below:

```
Savings Account
Name :Rama Sri
Account No :1234567
Balance :10000
Interest :15

Current Account
Name and Account Number : Rama Sri 1234567

Fixed Account
Name :Rama Sri
Account No :1234567
Balance :10000
Interest :0
Duration :15
```

Figure 3

[100%]