CS4013 Lab 4

Part 1:

1. Implement the solution to Q1 and Q2 in Tutorial 3.
2. Add a class called CurrentAccount as a subclass of BankAccount which has an overdraft limit. This means that a current account may be overdrawn up to the amount of the overdraft limit. A private data field of type double should be added to the class for the overdraft limit.
3. Add constructors as you deem appropriate.
4. Override the withdraw method in the CurrentAccount class to handle the overdraft limit.
5. Include a toString() method in each of the three classes (BankAccount, SavingsAccount, CurrentAccount).
6. Create a TestBankAccount class with an ArrayList of type BankAccount. Add savings accounts and current accounts to the ArrayList.
7. Set the annual interest rate of the bank accounts.
8. Invoke the deposit and withdraw methods for each bank account object to demonstrate the correct functioning of these methods.
9. Print the details of the bank accounts in the list.

Include the following four Java files as part of your submission for Lab 4 on Sulis: BankAccount.java; SavingsAccount.java; CurrentAccount.java and TestBankAccount.java.

Part 2:

1. Implement the solution to Q3 from Tutorial 3.
2. Your solution should work with the attached test program (See Sulis for TestTut3Q3.java)

Include TestTut3Q3.java, Person.java, Employee.java, Student.java, Faculty.java and Staff.java as part of your submission for Lab 4 on Sulis.