

1. BankAccount class

- a. Create a BankAccount base class
 - b. In **BankAccount base class**, create these methods. You have to make them work!
- **Properties**
 - AccountNumber (text)
 - Add validation to make this to be of length = 6
 - Name (text)
 - Balance (decimal)
 - Add validation to make sure this cannot be negative
 - DateCreated (date)
 - Add validation to make sure this cannot be a future date
 - **Constructors**
 - Create a constructor without any parameters
 - Set DateCreated to the current date
 - Create a constructor with 3 parameters
 - Set DateCreated to the current date
 - **DisplayAccountInfo()**
 - This method will display Account Number, Name and Balance
 - **Deposit()**
 - Takes 1 input parameter “amount” of type decimal
 - Adds amount to Balance
 - Write Balance to Console
 - **Withdraw()**
 - Takes 1 input parameter “amount” of type decimal
 - If Balance is > amount, then subtract amount from Balance
 - Else write an error to console
 - Write Balance to Console
 - **CalculateInterest()**
 - Write to Console “This method will calculate Interest”

SavingsAccount – Derived class from BankAccount base class

- **Properties**
 - Balance (decimal)
 - Add validation to make sure this cannot be less than 2500
- **Constructors**
 - Create a constructor without any parameters
 - Call the base class constructor
 - Create a constructor with 3 parameters
 - Call the base class constructor
- **CalculateInterest()**
 - Calculate 5% interest per year and add this interest to Balance
 - Write to Console “Added interest and updated Balance”
- **Withdraw() method**
 - If Balance is < 2500, write to Console an error message “Insufficient balance”

- Else call the Withdraw method of the base class

CheckingAccount – Derived class

- **Properties**
 - Balance (decimal)
 - Add validation to make sure this cannot be less than 500
- **Constructors**
 - Create a constructor without any parameters
 - Call the base class constructor
 - Create a constructor with 3 parameters
 - Call the base class constructor
- **CalculateInterest()**
 - Calculate 0.75% interest per year and add this interest to Balance
 - Write to Console “Added interest and updated Balance”
- **Withdraw() method**
 - If Balance is < 500, write to Console an error message “Insufficient balance”
 - Else call the Withdraw method of the base class