

Task: Design and create a class that represents a bank account. Name the class **BankAccount**. Create a UML class diagram that shows your design. Your UML class diagram must be submitted as part of this assignment. Your Bank class should contain the following:

1. A data field named **accountNumber** that holds the account number for the account. This field is an integer.
2. A data field named **balance** that holds the balance in the account. This field is a double.
3. A no-arg constructor that creates a default account object. It sets both data fields to zero.
4. A parameterized constructor that creates an account object with the specified account number and balance.
5. Getter methods for accountNumber and balance.
6. A method named **makeDeposit()** that takes a double as its argument, and adds the value of the argument to the balance.
7. A method names **makeWithdrawal()** that takes a double as its argument, and subtracts the value of the argument from the balance.

UML diagram:

BankAccount
-accountNumber: int -balance: double
+BankAccount() +BankAccount(:int, :double) +getAccountNumber(): int +getBalance(): double +makeDeposit(:double): void +makeWithdrawal(:double): void