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**Lab 8 UML Diagrams**

Question 11.1

GeometricObject
- color: String - filled: boolean - dateCreated: date
+ GeometricObject() + GeometricObject(color: String, filled: String) + getColor() * String + setColor(color: String) + isFilled() * boolean + setFilled(filled: boolean) + getDateCreated() * Date + toString() * String

Triangle
- side1: double - side2: double - side3: double
+ Triangle() + Triangle(side1: double, side2: double, side3: double) + getSide1() * double + getSide2() * double + getSide3() * double + getArea() * double + getPerimeter() * double + toString() * String

Question 11.3

Account
- id: int - balance: double - annualInterestRate: double - dateCreated: Date
+ Account() + Account(id: int, balance: double)

<pre> + setId(id: int) + setBalance(balance: double) + setAnnualInterestRate(annualInterestRate: double) + getId() * int + getBalance() * double + getAnnualInterestRate() * double + getDateCreated() * String + getMonthlyInterestRate() * double + getMonthlyInterest() * double + withdraw(amount: double) + deposit(amount: double) </pre>
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CheckingAccount
- overdraftLimit: double
<pre> + CheckingAccount() + CheckingAccount(id: int, balance: double, overdraftLimit: double) + setOverdraftLimit(overdraftLimit: double) + getOverdraftLimit() * double + toString() * String </pre>

SavingsAccount
<pre> + SavingsAccount() + SavingsAccount(id: int, balance: double) + withdraw(amount: double) </pre>

#### Question 11.5

Course
<pre> - courseName: String - students: ArrayList&lt;String&gt; - numberOfStudents: int </pre>
<pre> + Course(courseName: String) + addStudent(student: String) + getStudents() * ArrayList&lt;String&gt; + getNumberOfStudents() * int + getCourseName() * String + dropStudent(student: String) </pre>

### Question 11.11