Exercise 01

```
abstract class BankAccount {
    private String accountNumber;
    private double balance;

    // Getter for accountNumber
    public String getAccountNumber() {
        return accountNumber;
    }

    // Setter for accountNumber
    public void setAccountNumber(String accountNumber) {
        this.accountNumber = accountNumber;
    }

    // Getter for balance
    public double getBalance() {
        return balance;
    }

    // Setter for balance
    public void setBalance(double balance) {
        this.balance = balance;
    }

    // Abstract method to calculate interest
    public abstract double calculateInterest();
```

```
}

class SavingsAccount extends BankAccount {
    private static final double SAVINGS_INTEREST_RATE = 0.12;

    public double calculateInterest() {
        return getBalance() * SAVINGS_INTEREST_RATE;
    }

    public void dispalySaving(){
        System.out.println(calculateInterest());
    }
}

class CheckingAccount extends BankAccount {
    private static final double CHECKING_INTEREST_RATE = 0.02;
    public double calculateInterest() {
        return getBalance() * CHECKING_INTEREST_RATE;
    }
    public void dispalyCheck(){
        System.out.println(calculateInterest());
    }
}
```

```
public class Main {
    public static void main(String[] args) {
        SavingsAccount sA = new SavingsAccount();
        sA.setBalance(20000000);
        sA.dispalySaving();

        CheckingAccount cA = new CheckingAccount();
        cA.setBalance(1000000);
        cA.dispalyCheck();
    }
}
```

Output:

```
2400000.0
20000.0

Process finished with exit code 0
```