# 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