LAB # 08 Evaluation

Exercise:

- Create an employee class with name, address, and number as private instance variables of that class.
- Use a constructor to initialize these instance variables.
- Create a mailCheck method in employee class that prints "Mailing check to employee name and address.
- Create a toString method that returns the name, address, and number of the employee.
- Design Accessor and Mutator methods for private variables.
- Create a salary class that inherits the Employee class with an additional private instance variable as salary.
- Create a constructor to initialize the instance variables. Also make use of parent class constructor and mutator method to set the salary.
- Override the mailCheck method that prints the following.
    "Within MailCheck of Salary class"
    "Mailing check to Ali with salary 45000"
- Design Accessor and Mutator method for private variable
- Create a computePay method that prints" Computing salary pay for Ali". This method should return salary after dividing it by 52.
- Initiate two salary objects, one using salary reference and other using employee reference.
- Invoke mailCheck method by using salary and employee reference both.Display a message that determines which mailCheck method has been invoked(which reference is used?).

Code:
Main:

```java
package exercise;

public class Exercise {

    public static void main(String[] args) {
        Employee e1 = new Salary("Abdullah Sadiq", "xyz",000000,86000);
        Salary s1 = new Salary("Saad","bcbcbc",99373,110000);
        System.out.println("Involving MailCheck method by Employee Class Reference");
        e1.mailCheck();
        System.out.println("Involving MailCheck method by Salary Class Reference");
        s1.mailCheck();

        e1.toString();
        s1.toString();
        double pay = s1.computePay();
        System.out.println("The computed pay is " + pay);
    }
}
```

Employee (Parent):

```java
package exercise;

public class Employee {
    private String name, address;
    private int number;
    public Employee(String name, String address, int number){
     this.name = name;
     this.address = address;
     this.number = number;
    }
    public void mailCheck(){
        System.out.println("Mailing Check to " + name + " at " + address);
    }
    public String toString(){
        return name + ", " + address + ", " + number;
    }
    public String getName(){
        return name;
    }
    public void setName(String name){
        this.name = name;
    }
    public String getAddress(){
        return address;
    }
    public void setAddress(String address){
        this.address = address;
    }
    public int getNumber(){
        return number;
    }
    public void setName(int number){
        this.number = number;
    }
}
```

Salary (Child):

```java
package exercise;

public class Salary extends Employee{
    private double salary;
    public double getSalary(){
        return salary;
    }
    public void setSalary(){
        this.salary = salary;
    }
    public Salary(String name, String address, int number, double salary){
        super (name, address, number);
        this.salary = salary;
    }
    public void mailCheck(){
        System.out.println("MailCheck of Salary class");
        System.out.println("Mailing check to "+super.getName() + " with salary " +
getSalary());
    }
```

Abdullah

```java
    }
    public double computePay(){
        System.out.println("Computing salary pay for "+ super.getName());
        return salary / 52;
    }
}
```

Output:

```
--- exec-maven-plugin:3.1.0:exec (default-cli) @ Exercise ---
Involving MailCheck method by Employee Class Reference
MailCheck of Salary class
Mailing check to Abdullah Sadiq with salary 86000.0
Involving MailCheck method by Salary Class Reference
MailCheck of Salary class
Mailing check to Saad with salary 110000.0
Computing salary pay for Saad
The computed pay is 2115.3846153846152
------------------------------------------------------------------
BUILD SUCCESS
------------------------------------------------------------------
```