

Lab 2.1 Solutions

1. Implemented solution is under is the Java Project [Lab2.1](#) that is stored under folder [Solutions/Q1-Solution](#)
2. Implemented solution is under is the Java Project [Lab2.2](#) that is stored under folder [Solutions/Q2-Solution](#)

Regarding the implementation of the method `diffInYears()`, it is OK if you only implemented a solution that takes the difference in the years returning negative or positive result. A similar implementation is also in the source code in the Java project [Lab2.2](#) (but commented out).

```
public int diffInYears(Date date) {  
    return(date.year - this.year);  
}
```

Alternatively, you could have also implemented a more precise solution as follows:

```
public int diffInYears(Date date) {  
    Date date1 = this;  
    Date date2 = date;  
  
    if (date.getYear() - this.getYear() < 0) {  
        date1 = date;  
        date2 = this;  
    }  
  
    int date_month = date2.getMonth();  
    int date_year = date2.getYear();  
  
    // If difference between "day" values of two dates is negative  
    // reduce "date_month" by 1  
    if(date2.getDay() - date1.getDay() < 0)  
        date_month--;  
  
    // If difference between "month" values of two dates is negative  
    // reduce "date_year" by 1  
    if(date_month - date1.getMonth() < 0)  
        date_year--;  
  
    return (date_year - date1.getYear());  
}
```