

Lab 2

Full Scores: 60 points

Your name:	Score:
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Notice: Please refer to Lab Submission Requirements on how to submit your solution to Canvas.

You are to implement two Java classes, one is Date class (hint: start using the given Date class) and another one is test class. The program keeps asking for inputs for three integers (for month, day, and year) and then outputting the date in the following three formats:

MM/DD/YYYY

Month, Day, YYYY

DDD, YYYY

(DDD: the day number in the year: $1 \leq \text{DDD} \leq 365$)

The following overloaded constructors are required for class Date for the above 3 different formats, that is:

- i. One receiving three integers for month, day, and year;
- ii. One receiving a String (for month) and two integers for day and year;
- iii. One receiving two integers: the first being the day number in the year, and the second being the year.

A sample output is given below (Consider *leap year*! How to convert the String of the month to a numeric value? You may use String's equals method: `s1.equals(s2)` returns true if s1 and s2 are identical and false otherwise given two Strings s1 and s2.).

```
Enter Month (1-12): 3
Enter Day of Month: 3
Enter Year: 2000
```

```
MM/DD/YYYY: 3/3/2000
Month DD, YYYY: March 3, 2000
DDD YYYY: 63 2000
```

```
Enter Month (1-12): 3
Enter Day of Month: 3
Enter Year: 1999
```

```
MM/DD/YYYY: 3/3/1999
Month DD, YYYY: March 3, 1999
DDD YYYY: 62 1999
```

```
Enter Month (1-12): 3
Enter Day of Month: 3
Enter Year: 2012
```

```
MM/DD/YYYY: 3/3/2012
Month DD, YYYY: March 3, 2012
DDD YYYY: 63 2012
```