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? Date

Language/Type: C++ [classes](#)

Write a class of objects named Date that remembers information about a month and day. Ignore leap years and don't store the year in your object. You must include the following public members:

member name	description
Date(<i>m</i> , <i>d</i>)	constructs a new date representing the given month and day
daysInMonth()	returns the number of days in the month stored by your date object
getDay()	returns the day
getMonth()	returns the month
nextDay()	advances the Date to the next day, wrapping to the next month and/or year if necessary
toString()	returns a string representation such as "07/04"

You should define the entire class including the class heading, the private member variables, and the declarations and definitions of all the public member functions and constructor.

```
1 class Date {
2     private:
3         int m, d;
4
5     public:
6         Date(){
7             m = 0;
8             d = 0;
9         }
10
11        Date(int month, int day){
12            m = month;
13            d = day;
14        }
15
16        int getDay(){
17            return d;
18        }
19
20        int getMonth(){
21            return m;
22        }
23
24        int daysInMonth(){
25            switch (m) {
26                case 2:
27                    return 28;
28                case 4:
29                case 6:
30                case 9:
31                case 11:
32                    return 30;
33                default:
34                    return 31;
35            }
36        }
37
38        void nextDay(){
39            if(d < daysInMonth()) {
40                d++;
41            } else {
42
43                d = 1;
44                if(m != 12)
45                    m++;
46                else
47                    m = 1;
48            }
49        }
50    }
51
```

```
52     string toString(){
53         string day = to_string(d);
54         string month = to_string(m);
55         if (d < 10){
56             day = "0" + to_string(d);
57         }
58         if (m < 10){
59             month = "0" + to_string(m);
60         }
61         string retstr = month + "/" + day;
62         return retstr;
63     }
64 };
```

Class: Write a complete C++ class.



Submit



✓ You passed 8 of 8 tests.





test #1: getDay/getMonth
assertion: getDay result
value: 25
assertion: getMonth result
value: 12
result: ✓ pass


test #2: toString 1
assertion: toString result
value: "12/25"
result: ✓ pass


test #3: toString 2
assertion: toString result
value: "09/04"
result: ✓ pass


test #4: daysInMonth
assertion: daysInMonth 1
value: 31
assertion: daysInMonth 2
value: 28
assertion: daysInMonth 3
value: 31

assertion: daysInMonth 4
value: 30
assertion: daysInMonth 5
value: 31
assertion: daysInMonth 6
value: 30
assertion: daysInMonth 7
value: 31
assertion: daysInMonth 8
value: 31
assertion: daysInMonth 9
value: 30
assertion: daysInMonth 10
value: 31
assertion: daysInMonth 11
value: 30
assertion: daysInMonth 12
value: 31
result:  pass

test #5: nextDay 1: basic case
assertion: 10/14 state after nextDay
value: "10/15"
result:  pass

test #6: nextDay 2: wrap month
assertion: 10/31 state after nextDay
value: "11/01"
result:  pass

test #7: nextDay 3: wrap month 2
assertion: 6/30 state after nextDay
value: "07/01"
result:  pass

test #8: nextDay 4: wrap year
assertion: 12/31 state after nextDay
value: "01/01"
result:  pass

Testing began at 2023/04/23 14:56 (PDT) and ran for 1248 ms.

Need help?

Stuck on an exercise? [Contact your TA or instructor](#) .

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