Project 1 Test Specification for Date Class : isValid() Method
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Test Case #	Purpose of the Test Case	Input Data	Expected Output
1	Testing the boolean isValid() method which, given a date, will return true if the date is valid and false if the date is not valid.	"4/25/2000"	True
2	Testing the boolean isDateWithinBounds() helper method that checks if the year, month, and date are each within bounds of a regular date. ● Case 1: The input date is within bounds ● Case 2: The input year is greater than the latest possible year ● Case 3: The input year is less than the earliest possible year ● Case 4: The input month is greater than the latest possible month ● Case 5: The input month is less than the earliest possible month ● Case 6: The input day is greater than the maximum number of days ● Case 7: The input day is less than the minimum number of days.	● Case 1: "3/25/2003" ● Case 2: "8/23/2025" ● Case 3: "3/30/1889" ● Case 4: "31/2/2000" ● Case 5: "-1/24/2020" ● Case 6: "3/35/2005" ● Case 7: "4/0/1999"	● Case 1 returns true ● Case 2 returns false ● Case 3 returns false ● Case 4 returns false ● Case 5 returns false ● Case 6 returns false ● Case 7 returns false
3	Testing the boolean isBeforeTodaysDate() helper method that checks if the inputted date falls before the current date. ● Case 1: The input date is before today's date ● Case 2: The input month is after the current month ● Case 3: The input date is after the current date	● Case 1: "5/8/2010" ● Case 2: "3/1/2021" ● Case 3: "2/30/2021"	● Case 1 returns true ● Case 2 returns false ● Case 3 returns false
4	Testing the boolean checkDaysMonthCorrespondence()	● Case 1: "1/31/2009"	● Case 1 returns true

| | | helper method that checks whether the input day corresponds with the number of days in the inputted month.
● Case 1: The input date and month correspond
● Case 2: There is a maximum of 29 days in February
● Case 3: There is a maximum of 30 days in April
● Case 4: There is a maximum of 30 days in June
● Case 5: There is a maximum of 30 days in September
● Case 6: There is a maximum of 30 days in November | ● Case 2: "2/30/2020"
● Case 3: "4/31/2009"
● Case 4: "6/31/2008"
● Case 5: "9/31/2007"
● Case 6: "11/31/2006" | ● Case 2 returns false
● Case 3 returns false
● Case 4 returns false
● Case 5 returns false
● Case 6 returns false |
| 5 | Testing the boolean isLeapYear() helper method called by the checkDaysMonthCorrespondence() method when the date is February 29th. It checks if the input year is a leap year.
● Case 1: The input date is a leap year
● Case 2: The month and day implies a leap year, but it is not a leap year | ● Case 1: "2/29/2020"
● Case 2: "2/29/2021" | ● Case 1 returns true
● Case 2 returns false |