

Class name: Date

Method signature: public boolean isValid()

Test Case #	Requirement	Test Description and Input Data	Expected Result/ Output
1	The method will return true if the date entered is a February 29th in a leap year.	<ul style="list-style-type: none">- Create an instance of Date 2/29 in a year that is a leap year.- Test input: "2/29/2024"	true
2	The method will return true for a valid date in a non-leap year.	<ul style="list-style-type: none">- Create an instance of Date that is a valid day.- Test input: "7/15/2023"	true
3	The method will return true for a valid date at the end of a leap year.	<ul style="list-style-type: none">- Create an instance of Date that is a valid day in a leap year.- Test input: "12/31/2000"	true
4	The method will return true for a valid date in a non-leap year.	<ul style="list-style-type: none">- Create an instance of Date that is a valid day in a non-leap year.- Test input: "11/30/1999"	true
5	The method will return false for February 29th in a non-leap year.	<ul style="list-style-type: none">- Create an instance of Date that is 2/29 in a non leap year- Test input: "2/29/2023"	false
6	The method will return false for a date that does not exist.	<ul style="list-style-type: none">- Create an instance of Date that is the 31st for a month with only 30 days- Test input: "4/31/2023"	false
7	The method will return false for an	<ul style="list-style-type: none">- Create an	false

	invalid year.	instance of Date where the year is -1. - Test input: "1/10/-1"	
8	The method will return false for an invalid month.	- Create an instance of Date that has the 13th month - Test input: "13/1/2023"	false
9	The method will return false day 0.	- Create an instance of Date that is the 0th day of a month - Test input: "9/0/2023"	false

Class name: Profile

Method signature: public int compareTo()

Test Case #	Requirement	Test Description and Input Data	Expected Result/ Output
1	The last name that comes first alphabetically should come before the last name that comes second alphabetically	-Create two instances of profiles to compare, the first with last name Crosby and the second with last name Doe. -Test input: Profile 1: Jack Crosby, dob 5/15/1990 Profile 2: John Doe, dob 3/25/1992	<0 (Crosby before Doe)
2	If last names match, then the first name that comes first alphabetically should	-Create two instances of profiles to compare with the same last name and different first names. -Test input: Profile 1: Jack Crosby, dob 5/15/1990; Profile 2: Jane Crosby, dob 6/10/1992.	<0 (Jack before Jane)
3	If names are identical, the profile that has the earlier date of birth should come first	-Create two instances of profiles to compare with different birthdays but identical names. -Test input: Profile 1: Jack Crosby, dob	<0 (5/15/1990 before 3/25/1992)

		5/15/1990; Profile 2: Jack Crosby, dob 3/25/1992.	
4	If first name, last name, and dob match, profiles are identical.	-Create two instances of profiles that are identical to compare. -Test input: Profile 1: Jack Crosby, dob 5/15/1990; Profile 2: Jack Crosby, dob 5/15/1990	0 (Identical Profiles)
5	The last name that comes second alphabetically should come after the last name that comes second alphabetically	-Create two instances of profiles to compare, the first with last name Doe and the second with last name Crosby. -Test input: Profile 1: John Doe, dob 3/25/1992; Profile 2: Jack Crosby, dob 5/15/1990.	>0 (Doe after Crosby)