Date class
Method signature: public boolean isValid()

Test Case #	Requirement	Test description and Input Data	Expected result/Output
1	The method shall return false for any year before 1900	• Create an instance of Date with a valid day and month but with an invalid year <1900. • Test input: “09/13/1888”	false
2	Number of days in February for a non-leap year shall be 28. The method shall return false if the date given has 29 days for a non-leap year.	• Create an instance of Date with the month =2, day > 28, and the year is a non-leap year • Test input: “2/29/2023”	False
3	The valid range for the month shall be >=1 and <=12. The method shall return false for a month value outside the valid range.	Create an instance of Date with month being 13 Test input: “13/13/2015”	False
4	The valid range for february of leap year is between 1-29 inclusive	Create an instance of Date with february and a valid day for leap year. Test input: “2/29/2012”	True
5	The valid range for any month is either between 1-30 or 1-31 inclusive, 0 is not a valid day of a month	Create an instance of Date with 0 being the day of the month Test input: “8/0/2024”	False
6	The valid range of days in September is 1-30 inclusive	Create an instance of Date with 12 being the day of the month Test input:	True

		“9/12/2024”	

Class: Profile
Method signature: public int compareTo(Profile prof)

Test Case #	Requirement	Test description and Input Data	Expected result/Output
1	The two profile are the same and return null	Create two strings for first name and last name and a Date instance for date of birth, create two Profile instances with the same parameter and check using compareTo() Input: Profile(fname, name, dob)	0
2	The two profiles are different, the first profile has a last name that is smaller than the second	Create a string for last name of the first profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	-1
3	The two profiles are different, the second profile has a last name that is smaller than the first	Create a string for last name of the first profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	1
4	The two profiles are different, the second	Create a string for last name of the first	1

	profile has a last name that is smaller than the first	profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	
5	The two profiles are different, the second profile has a last name that is smaller than the first	Create a string for last name of the first profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	1
6	The two profiles are different, the second profile has a last name that is smaller than the first	Create a string for last name of the first profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	-1
7	The two profiles are different, the second profile has a last name that is smaller than the first	Create a string for last name of the first profile and another string for the last name of the second profile and check using compareTo to see if the first profile is smaller than the second profile	-1