

Aryan Patel - Group #65

Date Class isValid() Method:

Test Desc.	Input (Date Object)	Output (Boolean)	Passing
Test 1: Month value is out of range. Should be between 1 and 12 inclusive.	13/30/2022	False	Yes
Test 2: February 29th only exists in leap year. 1900 is not a leap year.	2/29/1900	False	Yes
Test 3: Day value is out of range for January. Should be between 1 and 31 inclusive.	01/32/2006	False	Yes
Test 4: Month value cannot be 0. Out of range. Should be between 1 and 12 inclusive.	00/01/2002	False	Yes
Test 5: Day value is out of range for February. Should be between 1 and 28 inclusive if not a leap year, or 1 and 29 inclusive if it is a leap year.	02/30/2002	False	Yes

Test 6: Day value is out of range for September. Should be between 1 and 30 inclusive.	09/31/1990	False	Yes
Test 7: Day value cannot be 0 at the start of any month.	04/00/2003	False	Yes
Test 8: Year value cannot be 0.	1/15/0000	False	Yes
Test 9: Valid regular calendar date.	01/22/2002	True	Yes
Test 10: Valid calendar date (28 max days if not leap year)	2/28/1990	True	Yes
Test 11: Valid leap year date.	02/29/2020	True	Yes
Test 12: Valid calendar date (max 31 days in July).	7/31/2009	True	Yes

Test 13: Valid calendar date (max 30 days in November).	11/30/2005	True	Yes
Test 14: No argument constructor for Date class.	Date(): Empty constructor uses current date.	True	Yes

14/14 test cases passed.

Student Class compareTo() Method:

Test Desc.	Input (Student Object A and B) <small>**major + credits remain constant, comparing Profiles only</small>	Output (int)	Passing
Test 1: Compare (Mehta, Aryan 1/22/2002) to (Patel, Aryan 1/22/2002). Last names are not equal.	A: (Mehta, Aryan 1/22/2002) B: (Patel, Aryan 1/22/2002).	negative int A -> B	Yes
Test 2: Compare (Patel, Aryan 1/22/2002) to (Mehta, Aryan 1/22/2002). Last names are not equal.	A: (Patel, Aryan 1/22/2002) B: (Mehta, Aryan 1/22/2002)	positive int B -> A	Yes

Test 3: Compare (Patel, Aryan 1/22/2002) to (Patel, Raj 1/22/2002). Last names are equal, first names are not.	A: (Patel, Aryan 1/22/2002) B: (Patel, Raj 1/22/2002)	negative int A -> B	Yes
Test 4: Compare (Patel, Raj 1/22/2002) to (Patel, Aryan 1/22/2002). Last names are equal, first names are not.	A: (Patel, Raj 1/22/2002) B: (Patel, Aryan 1/22/2002)	positive int B -> A	Yes
Test 5: Compare (Patel, Aryan 1/22/2002) to (Patel, Aryan 2/22/2002). First and last names are equal, date of birth is not (MM).	A: (Patel, Aryan 1/22/2002) B: (Patel, Aryan 2/22/2002)	negative int A -> B	Yes
Test 6: Compare (Patel, Aryan 2/22/2002) to (Patel, Aryan 1/22/2002). First and last names are equal, date of birth is not (MM).	A: (Patel, Aryan 2/22/2002) B: (Patel, Aryan 1/22/2002)	positive int B -> A	Yes
Test 7: Compare (Patel, Aryan 1/22/2002) to (Patel, Aryan 1/23/2002). First and last names are equal, date of birth is not (DD).	A: (Patel, Aryan 1/22/2002) B: (Patel, Aryan 1/23/2002)	negative int A -> B	Yes

Test 8: Compare (Patel, Aryan 1/23/2002) to (Patel, Aryan 1/22/2002). First and last names are equal, date of birth is not (DD).	A: (Patel, Aryan 1/23/2002) B: (Patel, Aryan 1/22/2002)	positive int B -> A	Yes
Test 9: Compare (Patel, Aryan 1/22/2002) to (Patel, Aryan 1/22/2003). First and last names are equal, date of birth is not (YYYY).	A: (Patel, Aryan 1/22/2002) B: (Patel, Aryan 1/22/2003)	negative int A -> B	Yes
Test 10: Compare (Patel, Aryan 1/22/2003) to (Patel, Aryan 1/22/2002). First and last names are equal, date of birth is not (YYYY).	A: (Patel, Aryan 1/22/2003) B: (Patel, Aryan 1/22/2002)	positive int B -> A	Yes
Test 11: Compare (Patel, Aryan 1/22/2002) to (Patel, Aryan 1/22/2002). First name, last name, and date of birth all equal.	A: (Patel, Aryan 1/22/2002) B: (Patel, Aryan 1/22/2002).	Zero (0)	Yes

11/11 test cases passed.