CMSC 201 Section 60
Fall 2022
Student test cases for Project 2

Here are 10 test cases that your program should be able to handle. For each test case, we specify what we're trying to do, the keystroke sequence to run the test, and the expected result.

1. Find Marie Curie, by last name, in the Fall 2025 class
    - Keystroke sequence:
        - "L" to search by last name
        - "F" for Fall 25
        - "Curie"
            - The program should offer the option of choosing "Marie Curie" or "Pierre Curie"
            - Choose "Marie Curie"
    - Expected Result:
        - 583 points; course grade was an "A"

2. Find Thierry Henry, by Student ID, in any class
    - Keystroke sequence:
        - "S" for Student ID
        - "U" for any semester
        - "CS0BJS"

    - Expected result:
        - Total points 533; course grade "B"

3. Find Cersei Lannister, by Student ID, in Spring 2026
    - Keystroke sequence:
        - "S" for Student ID
        - "S" for Spring 2026
        - "27Y1AC"

    - Expected result:
        - Total points: 521; course grade "B"

4. Find Abby Wambach, by last name, in any class
    - Keystroke sequence:
        - "L" for last name
        - "U" for any class
        - "Wambach"
    - Expected result:
        - An appropriate error message stating that that person was not a student

5. Find Rebecca Mannion, by last name, in Spring 2026 (this should fail; she's not in that class)
    - Keystroke sequence:
        - "L" for last name
        - "S" for Spring 2026
        - "Mannion"
    - Expected result:
        - An appropriate error message stating that that person was not a student in Spring 2026

6. Find Rebecca Mannion, by last name, in any class
    - Keystroke sequence:
        - "L" for last name
        - "U" for any semester
        - "Mannion"
            - This should result in the user being asked to choose either "Rebecca Mannion" or "Rupert Mannion"
            - Choose "Rebecca Mannion"
    - Expected result:
        - Total points: 482 grade "C"

7. Immediately quit the program
- Start the program
- Type "Q"
- Expected result: the program should terminate with an appropriate farewell message

8. Find Albert Einstein, by Student ID, in Fall 2025
    - Keystroke sequence:
        - "S" for Student ID
        - "F" for Fall 25
        - Enter "LDRIHT" (Einstein's student ID)
    - Expected result:
        - Total points: 583; course grade "A"

9. Find Roy Kent, by Student ID, in Fall 2026
    - Keystroke sequence:
        - "S" for Student ID
        - "T" for Fall 2026
        - "MIPIES" - this is intentionally the wrong student ID

- This should result in an error noting that the student ID was not found, and a prompt asking for another student ID
  - "M1P1ES" - this is the correct student ID
- Expected result:
  - Total points 534; course grade "B"

10. Find Freeman Hrabowski by Student ID in any class - this should fail; the Student ID will not match any)
    - Keystroke sequence:
      - "S" for Student ID
      - "U" for any semester
      - "123456"
    - Expected result:
      - This student will not be found. Display the error message as described in Step 7.
      - Choose Q to quit.