1. testAddTask

• **Description**: This test checks that a new task is added correctly to the Profile's task list.

Steps:

- First, it verifies that there are initially 2 tasks in the profile by checking the size of the task list.
- A new task (Test Task 3) is added to the profile with a due date set to 2 days from today and a reward for the IMAGINATION attribute.
- o After adding the new task, it checks that the task list now contains 3 tasks.
- It also verifies that the newly added task has the correct name (Test Task 3),
 the correct due date, and the correct rewards (IMAGINATION set to 20).

Assertions:

 Verifies that the task list has been updated correctly and that the new task is added with the correct values.

2. testFinishTask

• **Description**: This test checks the behavior of the finishTask method, ensuring that completing a task updates the user's attributes and removes the task from the task list.

Steps:

- The test finishes testTask1 using the finishTask method.
- After finishing the task, it verifies that the task list now contains only 1 task (the unfinished one) and that the finished task (testTask1) is removed.
- It checks that the STRENGTH and INTELLECT attributes are updated according to the rewards from testTask1, with STRENGTH set to 10 and INTELLECT set to 5.

Assertions:

- o Ensures the task list is updated correctly (finished task is removed).
- Verifies that the power attributes are updated as expected based on the task's rewards.

3. testDeleteTask

• **Description**: This test verifies the functionality of the deleteTask method, ensuring that a task is correctly deleted from the profile's task list.

Steps:

- o It deletes testTask1 from the task list using the deleteTask method.
- After deletion, it checks that the task list contains only testTask2, the remaining task.
- It ensures that testTask1 is no longer in the task list and that testTask2 is still present.

Assertions:

- Confirms that after deletion, the task list is correctly updated, containing only the remaining task.
- Verifies that the deleted task is no longer in the list, and the remaining task is unaffected.

4. testEditTask

• **Description**: This test ensures that the editTask method correctly updates the name and due date of a task.

Steps:

- It modifies testTask1's name to "Updated Task 1" and changes its due date to 3 days from today using the editTask method.
- After editing the task, it checks if the name and due date of testTask1 have been updated correctly.

Assertions:

- Verifies that the task's name is updated to "Updated Task 1".
- Ensures the task's due date is updated correctly to 3 days from today.