

Physics Acceleration

Average acceleration is defined as the change of velocity divided by the time taken to make the change, as shown in the following formula: **acceleration** = (**velocity1** - **velocity0**) / **time** Here, **velocity0** is the starting velocity in meters per second, **velocity1** is the ending velocity in meters per second, and **time** is the time span in seconds.

Create variables (double) named **acceleration**, **velocity0**, **velocity1**, and **time**. Assign **velocity0** a value of 5.6, **velocity1** is 10.5, and **time** is 0.5, and write the code to calculate, assign, and display the average acceleration, stored in the variable **acceleration**. You do not have to accept user input for this lab; assign literal values to the variables in your code, make the necessary calculations storing the result in your variable for **acceleration**, and display the value.

Deliverables

Make sure your code has the required file header and correctly formatted identifier names, as outlined in the CS Java Documentation Policy under Course Info on D2L.

To receive credit for this lab you must

1. Demonstrate the code and execution to the instructor during this lab, during office hours, or during the next lab period.
2. Zip the src folder in your project directory and upload the instructor approved .java files to the Lab 3 D2L drop box.