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| **Pre-AP® Computer Science** |  |
| **The Speeding Ticket Program** |  |
| **Assignment Purpose:**  The purpose of this program is to demonstrate knowledge of keyboard input, selection control structures and string manipulation in a practical program. | |

Write a program which will enter information relating to a speeding violation and then compute the amount of the speeding ticket. The program will need to enter the posted speed limit, actual speed the car was going, and whether or not the car was in a school zone and the date of the violation. Additionally, you will collect information about the driver (see output for specifics).

The way speeding tickets are computed differs from city to city.

For this assignment, we will use these rules, which need to be applied in this order:

1. All tickets will start with a minimum amount of **$75**.
2. An additional **$6** is charged for every mph over the posted speed limit.
3. If you are traveling over **30mph** over the posted speed limit, an additional **$160** is charged.
4. If the speeding occurred in a school zone, the cost of the ticket is **doubled**.

You will then print the ticket on the output screen.

This program is not concerned with checking for proper input. For example, if the posted speed limit is 55mph, and you were traveling 50mph, then a ticket would not be necessary in the first place. For this program, you can assume that the data will be entered correctly.

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| **TicketRunner Student Version** | **Do not copy this file, which is provided.**  **The ticket.java file is also provided.** |
| **// The Speeding Ticket Program //  //Name - //Date - //Class - //Lab -**  **import java.util.Scanner; import java.lang.System.\***  **public class TicketRunner**  **{**  **public static void main(String args[])**  **{**  **System.out.println("The Speeding Ticket Program");**  **System.out.println();**  **System.out.println("By: John Smith"); // Substitute your own name here.**  **System.out.println("\n==============================\n");**  **}**  **}** | |

**Output #1**

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| ----jGRASP exec: java Lab07Av100  The Speeding Ticket Program  By: John Smith  ==============================  Name of Driver? --> Johnny Viking  Driver’s License Number? --> 02453756  Address? --> 234 Dulles  City? --> Sugar Land  State? --> TX  Zip? --> 77044  Did the violation occur in a school zone? {Y/N} --> N  Date of Violation:  Month (number)? --> 02  Day? --> 14  Year? --> 21  What is the posted speed limit? --> 40  How fast was the car travelling in mph? --> 55  02/14/21  Johnny Viking (TDL: 02453756)  234 Dulles  Sugar Land, TX 77044  Dear Citizen Viking,  You have received this citation for driving 55 mph in an area with a posted speed limit of 40.  This violation did not occur in a school zone.  Your fine is $165.00 and can be paid at the address below.  Please remember to buckle up and drive safely.    ----jGRASP: operation complete. |

**Output #2**

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| ----jGRASP exec: java Lab07Av100  The Speeding Ticket Program  By: John Smith  ==============================  Name of Driver? --> Cindy Knight  TDL? --> 23456835  Address? --> 2145 Elkins  City? --> Sugar Land  State? --> TX  Zip? --> 72345  Did the violation occur in a school zone? {Y/N} --> Y  You must enter a capital **Y** for this to work.  A lowercase **y** will not give the correct output.  Date of Violation:  Month (number)? --> 01  Day? --> 28  Year? --> 21  What is the posted speed limit? --> 40  How fast was the car travelling in mph? --> 80  01/28/21  Cindy Knight(TDL: 23456835)  2145 Elkins  Sugar Land, TX 72345  Dear Citizen Knight,  You have received this citation for driving 80 mph in an area with a posted speed limit of 40.  This violation occurred in a school zone.  Your fine is $950 and can be paid at the address below.  Please remember to buckle up and drive safely. |