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| **Pre-AP® Computer Science** | **Lab 05E**  **1-Day Minor Java Assignment** |
| **The Speeding Ticket Program** | **100 Point Version Only** |
| **Assignment Purpose:**  The purpose of this program is to demonstrate knowledge of program input and selection control structures 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.

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 speeding 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**.

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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| **Lab 05E Student Version** | **Do not copy this file, which is provided.** |
| **// Lab05Est.java**  **// The Speeding Ticket Program**  **// This is the student, starting version of Lab 05E.**  **public class Lab05Est**  **{**  **public static void main(String args[])**  **{**  **System.out.println("Lab 05E");**  **System.out.println();**    **System.out.println();**  **}**  **}** | |

**100 Point Version Output #1**

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| ÏÏ«Ï ----jGRASP exec: java Lab05Ev100 ÏÏ§Ï ÏÏ§ÏLab 05E ÏÏ§Ï ¼¼§ÏWhat is the posted speed limit? --> 40 ÏÏ§Ï ¼¼§ÏHow fast was the car travelling in mph? --> 55 ÏÏ§Ï ¼¼§ÏDid the violation occur in a school zone? {Y/N} --> N ÏÏ§Ï ÏÏ§ÏTicket amount: $165 ÏÏ§Ï ÏÏ©Ï ----jGRASP: operation complete. |

**100 Point Version Output #2**

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| ÏÏ«Ï ----jGRASP exec: java Lab05Ev100 ÏÏ§Ï ÏÏ§ÏLab 05E ÏÏ§Ï ¼¼§ÏWhat is the posted speed limit? --> 55 ÏÏ§Ï ¼¼§ÏHow fast was the car travelling in mph? --> 90 ÏÏ§Ï ¼¼§ÏDid the violation occur in a school zone? {Y/N} --> N ÏÏ§Ï ÏÏ§ÏTicket amount: $445 ÏÏ§Ï ÏÏ©Ï ----jGRASP: operation complete. |

**100 Point Version Output #3**

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| ÏÏ«Ï ----jGRASP exec: java Lab05Ev100 ÏÏ§Ï ÏÏ§ÏLab 05E ÏÏ§Ï ¼¼§ÏWhat is the posted speed limit? --> 20 ÏÏ§Ï ¼¼§ÏHow fast was the car travelling in mph? --> 75 ÏÏ§Ï ¼¼§ÏDid the violation occur in a school zone? {Y/N} --> Y ÏÏ§Ï ÏÏ§ÏTicket amount: $1130 ÏÏ§Ï ÏÏ©Ï ----jGRASP: operation complete.  You must enter a capital **Y** for this to work.  A lowercase **y** will not give the correct output. |