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**Sec:B(B2)**

**JS Practical 3 (Part 1)**

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| **Task** | **Description** |
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| 1 | Write a program to check if a number is positive, negative, or zero using if...else. |
| 2 | Accept user input (via prompt()) for the day of the week and display a message using switch. |
| 3 | Create a traffic light simulator using switch (Red → Stop, Yellow → Wait, Green → Go). |
| 4 | **ATM Simulator** Ask the user for a transaction type:   * "withdraw": Ask for amount; if less than balance, deduct and show new balance. * "deposit": Ask for amount; add to balance and show it. * "balance": Show current balance. * Default: "Invalid transaction type" |
| 5 | **AI Emotion Detector (Imperfect Inputs)** You are building an AI chatbot that reacts differently based on a user's emotional state. But the only input you get is a **vague sentiment score from -10 to +10**, and a **contextual keyword** (e.g., "tired", "excited", "confused"). **Task:** Write conditionals to determine the chatbot's response. But note:   * A sentiment score of 6 with the word "tired" is not clearly happy or sad. * Score -3 with "confused" might need empathy *or* redirection. * Score 0 with no keyword: Unknown state—how will your bot decide?   **Challenge:** You must deal with **conflicting or incomplete conditions**. |
| 6 | **Game NPC Decision Logic (With Unpredictable Player Behavior)** You are coding an NPC (non-playable character) in a game. The NPC’s actions depend on the player’s status:   * health (0–100) * reputation (-50 to +50) * inventory items (e.g., "sword", "magic ring", or empty)  **Task:** Determine the NPC’s reaction:   * If health is low but reputation is high, should they help the player? * What if the player is hated (-45) but holding a legendary item? * What if the player just healed from 5 → 90 but previously attacked the NPC?   **Challenge:** There is **no single correct answer**—You must **justify your conditions** and handle **conflicting variables**. |

