Practice questions

🟢 Level 1 — Easy (Basic Hands-On)

Q1. Display a Character

Write an assembly program to display the character `'A'` on the screen.

💡 *Hint:* Use `INT 21H` with `AH = 02H`.

Q2. Display Two Characters

Write a program to display two characters, `'H'` and `'I'`, one after another.

💡 *Hint:* Call the display interrupt twice.

Q3. Take a Character as Input and Display It Back

Write a program that accepts a single character from the user and immediately displays it back.

💡 *Hint:* Input → `AH = 01H`, then output → `AH = 02H`.

🟡 Level 2 — Moderate (Arithmetic + String I/O)

Q4. Increment a Value and Display Result

Initialize a register (`AL = 05H`), increment it by 1, and display the result as a digit.

💡 *Hint:* Use `INC AL`, then add `30H` to convert to ASCII before display.

Q5. Decrement a Value and Display Result

Initialize a register (`AL = 07H`), decrement it by 1, and display the result as a digit.

💡 *Hint:* Use `DEC AL`, then add `30H` to convert to ASCII.

Q6. Display a String Message

Write a program to display the message `"HELLO WORLD"` on the screen.

💡 *Hint:* Define the string in the `.DATA` segment and end it with `$`.

Q7. Display Your Name

Write a program to display your full name (e.g., `"ANINDA ROY"`) as a string.

💡 *Hint:* Same as Q6 — use `INT 21H`, `AH = 09H`.

🔴 Level 3 — Hard (Multi-Step but No Logic Flow)

Q8. Input a Character and Show Its ASCII Code (Decimal Digit)

Take a character as input and display its ASCII value (e.g., input `A` → output `65`).

💡 *Hint:* Show one or two digits only — simple numeric display.

Q9. Input Two Characters and Display Them with a Space

Take two characters as input and display them separated by a space.

🧩 *Example:*

Input → `A`, `B`

Output → `A B`

💡 *Hint:* Input twice, store both, then output with a space character (ASCII 32).

Q10. Show Increment and Decrement Together

Initialize `AL = 05H`, increment once and display, then decrement twice and display again.

🧩 *Expected Output:*

```
After increment: 6
After double decrement: 4
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💡 *Hint:* Use `INC` and `DEC` separately, with `INT 21H` after each operation.
