ASM TEST

Duration : 60 min Point: 10

Question 1 (3 points)

Write a C program that:

- Inputs an integer `n` ($1 \leq n \leq 100$) and an array of `n` integers.

- Prints the input array.

- Calculates and prints how many elements are greater than the average value of the array.

Question 2 (3 points)

Write a program that:

- Inputs two integers `a` and `b`.

- Uses a pointer-based function to swap the values of `a` and `b`.

- Prints the values after swapping.

Implement the function:

```
void swap(int *x, int *y);
```

❌ Do not swap directly in `main` using `a = b;`.

Question 3 (4 points)

Define the following structures:

```
struct Date {
    int day;
    int month;
    int year;
};
struct Book {
    char title[100];
    char author[50];
    struct Date publishDate;
};
```

Write a program to:

a) (2 points) Input information for `n` books and print them.

b) (2 points – for high-performing students) Find and print the book with the most recent publish date.

🔍 Hint: Compare year → month → day to find the latest.

Grading Notes:

Question	Skill Evaluated	Notes
Q1	Basic syntax: array, loop	Easy
Q2	Pointer, function usage	Medium
Q3	Struct, logic, comparison	Advanced – used for differentiation