KING SAUD UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCES Computer Science Department	
CSC 111 **Computer Programming - I**	**Lab # 10** Memory Model, Data Structures, and Recursion

Monday: Identity Verification and Shallow Copies

Write a Python program to compare value equality (==) versus memory identity (is) when creating copies of daily sales data.

The program should:

1. Store an initial list of daily sales: `[150, 200, 250, 300]`.
2. Define a global variable: `TARGET_SALE = 220`.
3. Ask the user to enter a discount amount to subtract from each sale.
4. Define a function `analyze_sales(sales, discount)` that:
    - Creates a shallow copy of the sales list using slicing: `sales_copy = sales[:]`.
    - Subtracts `discount` from each item in `sales_copy`.
    - Checks if `sales is sales_copy` (identity comparison).
    - Counts how many sales in `sales_copy` are >= `TARGET_SALE`.
    - Calculates the average of the updated sales.
    - Returns `sales_copy`, the average, the target count, and the boolean result of `sales is sales_copy`.
5. Call the function from the main program and display the updated sales, average (2 decimal places), target count, and identity result.

Sample Run

```
Memory ID (before):  3023722433984
Enter discount amount: 20
Memory ID (after):  3023722558656
Adjusted sales: [130, 180, 230, 280]
Average sales: 205.00
Days reaching target: 2
Is same object in memory: False
```