

Exercise:

You work for a retail company that sells products across multiple stores. Your task is to analyze the sales data and provide insights to the management team. The sales data is stored in a matrix called **sales_data**, where each row represents a store, and each column represents a product. The elements of the matrix represent the sales quantities.

```
sales_data = [ 100, 50, 75;  
               80, 65, 90;  
               120, 90, 110;  
               70, 55, 85;  
               95, 80, 105 ];
```

1. Create a matrix named **sales_data** and enter above data.
2. Calculate the total sales for each store and store the results in a vector called **store_totals**.
3. Calculate the total sales for each product and store the results in a vector called **product_totals**.
4. Determine the store with the highest total sales and store its index in a variable called **best_store_index**.
5. Determine the product with the highest total sales and store its index in a variable called **best_product_index**.
6. Create a new matrix called **sales_percentage** that contains the percentage of sales for each store and product relative to the total sales. Each element of the matrix should represent the percentage value.
7. Identify the stores that have achieved sales above a certain threshold (e.g., 100 units) for a specific product (e.g., product 3) and store their indices in a vector called **high_sales_stores**.
8. Calculate the average sales quantity for each store and store the results in a vector called **average_sales**.
9. Determine the store with the lowest average sales and store its index in a variable called **worst_store_index**.