Mini Project: NumPy Basics

Project 1:

Robots often collect sensor readings (temperature, distance, battery level, etc.) during operations.
You are given a dataset of sensor readings. Write a Python program using **NumPy** to:

1. Load the sensor data from a CSV file.
2. Calculate:
    - Average, minimum, and maximum of each sensor.
    - Find the time when the temperature was highest.
    - Count how many times battery percentage went below 30%.
3. Save the processed results into a new output file.

CSV File in the Folder named sensor_data!

Project 2:

A robot moves in a **2D grid world** where its positions (x, y) are logged in a file.
You are given a dataset of the robot's path. Write a Python program using **NumPy** to:

1. Load the robot's positions from a CSV file.
2. Compute:
    - Total distance traveled by the robot.
    - The farthest point from the origin (0,0).
    - Detect if the robot ever revisited the same position.
3. Save the results into a file.

CSV File in the Folder named robot_path!