	IIT KHARAGPUR AI4ICPS I HUB FOUNDATION
AI4ICPS IIT Kharagpur	Hands-on Approach to AI, Cohort-2, July – October 2024
	Additional Programming Assignment 1: Python

Important Instructions about Programming Assignments

1. Programming assignments will be evaluated automatically. **Do not** change the skeleton code provided to you.
2. Write your code **only in the designated places** in the skeleton code and process the input data provided to you in the designated variables. **Do not alter** the input output structure in the skeleton code.
3. **Do not import** any additional libraries. **Do not use any additional files** for the processing (other than those mentioned in the skeleton code).
4. Failure to comply with these instructions may lead to you getting **zero marks** for the assignment, even if the solution is largely correct.

Question:

Objective: Using the provided dataset `data.csv`, which consists of the first 100 rows for processing, you are tasked with filling in the `skeleton.py` file to analyze FIFA player data based on user-provided inputs through command line arguments. Each test case corresponds to a country's name and a club's name, where you must find:

1. Common players between the specified country and club.
2. Mean wage of all players from the specified club.
3. Mean overall score of all players from the specified country.

Tasks:

1. **Dataset and Preparation:**
   ○ The dataset `data.csv` has already been read, and the first 100 rows are selected for processing.
2. **Function Definitions (in `skeleton.py`):**
   ○ Implement functions to:
      ■ Convert player wage strings to numeric values (`convert_wage_to_numeric`).
      ■ Calculate the mean overall score of players from a specified country (`mean_overall_country`).
      ■ Calculate the mean wage (converted to numeric) of players from a specified club (`mean_wage_club`).
      ■ Find common players between a specified club and country (`common_players`).

3. **Testing:**
   - The `skeleton.py` file will be tested against 10 test cases.
   - Each test case consists of a command line argument pair: the first argument is the country's name and the second argument is the club's name.

Submission:

- Fill in the `skeleton.py` file with the implemented functions and necessary logic.
- Submit the completed `skeleton.py` file for evaluation.

Sample Output:

```
test@test:~/$ python3 Solution.py Argentina FC\ Barcelona
['L. Messi', 88.67, 307500.0]
test@test:~/$ python3 Solution.py Egypt Liverpool
['M. Salah', 88.0, 185000.0]
```