Capstone Project - Python Fundamentals

This document summarizes the tasks performed for the Python Fundamentals Capstone Project using three datasets and basic operations in pandas and numpy. The work is done in a simple student-friendly style.

1. Task 1: Created three dataframes – Employee, Seniority, and Project – and saved them as CSV files.
2. Task 2: Replaced missing values in the 'Cost' column of Project dataframe using running average with a for loop.
3. Task 3: Split the 'Name' column in Employee dataframe into 'First Name' and 'Last Name'.
4. Task 4: Merged all three dataframes into a single dataframe called 'Final'.
5. Task 5: Added a 'Bonus' column (5% of project cost) for finished projects.
6. Task 6: Demoted the designation by 1 for failed projects and removed rows with level > 4.
7. Task 7: Added titles ('Mr.' or 'Mrs.') to First Name based on gender and dropped the Gender column.
8. Task 8: Promoted designation by 1 for employees older than 29 years.
9. Task 9: Created a new dataframe showing total project cost per employee called 'TotalProjCost'.
10. Task 10: Displayed employee details where city name contains the letter 'o'.