

CS 4375

ASSIGNMENT 1

Names of students in your group:

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Number of free late days used: 0

Note: You are allowed a **total** of 4 free late days for the **entire semester**. You can use at most 2 for each assignment. After that, there will be a penalty of 10% for each late day.

Please list clearly all the sources/references that you have used in this assignment.

1. GeeksforGeeks. "Hyperparameter Tuning in Linear Regression." *GeeksforGeeks*, <https://www.geeksforgeeks.org/machine-learning/hyperparameter-tuning-in-linear-regression/>. Accessed 15 Feb. 2026.
2. GeeksforGeeks. "Gradient Descent Algorithm and Its Variants." *GeeksforGeeks*, <https://www.geeksforgeeks.org/machine-learning/gradient-descent-algorithm-and-its-variants/>. Accessed 15 Feb. 2026.
3. GeeksforGeeks. "Data Visualization with Python Seaborn." *GeeksforGeeks*, <https://www.geeksforgeeks.org/data-visualization/data-visualization-with-python-seaborn/>. Accessed 15 Feb. 2026.
4. Cortez, Paulo. "Student Performance Data Set." *UCI Machine Learning Repository*, 2014, <https://archive.ics.uci.edu/dataset/320/student+performance>. Accessed 15 Feb. 2026.
5. Scikit-learn developers. "Supervised Learning." *Scikit-learn Documentation*, https://scikit-learn.org/stable/supervised_learning.html. Accessed 15 Feb. 2026.
6. GeeksforGeeks. "Stochastic Gradient Descent Regressor." *GeeksforGeeks*, <https://www.geeksforgeeks.org/python/stochastic-gradient-descent-regressor/>. Accessed 15 Feb. 2026.