**Introduction to AI/ML (Weeks 1–4)**

Over the first four weeks of the SoC’25 AI/ML track, I have built a solid foundation in both programming and machine learning. I began by revisiting core Python concepts such as variables, conditionals, loops, functions, and data structures, which strengthened my logical thinking and programming skills. In Week 2, I progressed to working with data using NumPy and Pandas—learning to handle, clean, and transform structured data efficiently, including reading from CSV files and performing statistical operations. Week 3 introduced me to data visualization through Matplotlib and Seaborn, where I learned to create clear, informative plots like bar charts, heatmaps, and histograms to better understand data patterns and relationships. Finally, in Week 4, I took my first step into machine learning by implementing a linear regression model using scikit-learn. I learned how to train a model, make predictions, and evaluate its performance using metrics such as R² and Mean Squared Error. These four weeks have given me a strong, hands-on understanding of the entire data pipeline—from raw data and visualization to building predictive models—forming a solid base for the more advanced topics ahead.