# **Assignment Solution:**

## **Pseudocode:**

- Import data entry from CSV file to DataFrame.
- Define local dictionary prediction.
- Points in prediction area to get prediction status.
- Restart dictionary Distribution of prediction and additional possibilities.
- Loop over wind farm area on data entry.
- Get wind farm details: name, forecast, capacity.
- calculate returns based on forecast/capacity > Loop regional forecast- To new classification Calculate forecasts for wind farms in a region based on \* Regional Forecast.
- Check and update wind farm capacity Estimated locations for wind farms in a region.
- Update additional wind farms potential.
- Check if all forecast locations are in line with state forecasts Check whether the forecast / exact location by state Weather Forecast Weather Forecast.
- Print the forecast location for all wind farms.
- Check whether the final full address forecast equals the state forecast.
- Print all prediction.

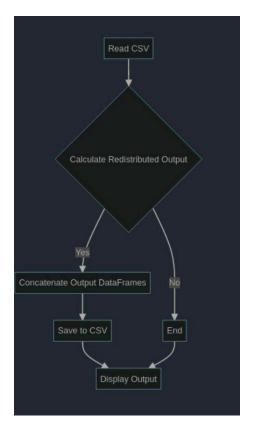


# IF WE SEE FINAL OUTPUT THEN IT IS CORRECT ALSO INDIVIDUAL CASES ARE CORRECT

Wind Farm: E1, Redistributed Forecast: 61.696658097686374

Wind Farm: E2, Redistributed Forecast: 92.54498714652956

Wind Farm: E3, Redistributed Forecast: 30.848329048843187



Wind Farm: E4, Redistributed Forecast: 61.696658097686374 Wind Farm: E5, Redistributed Forecast: 92.54498714652956 Wind Farm: E6, Redistributed Forecast: 185.08997429305913 Wind Farm: E7, Redistributed Forecast: 61.696658097686374 Wind Farm: E8, Redistributed Forecast: 92.54498714652956 Wind Farm: E9, Redistributed Forecast: 61.696658097686374 Wind Farm: E10, Redistributed Forecast: 123.39331619537275 Wind Farm: E11, Redistributed Forecast: 123.39331619537275 Wind Farm: E12, Redistributed Forecast: 308.48329048843186 Wind Farm: E13, Redistributed Forecast: 61.696658097686374 Wind Farm: E14, Redistributed Forecast: 61.696658097686374 Wind Farm: E15, Redistributed Forecast: 246.7866323907455 Wind Farm: E16, Redistributed Forecast: 61.696658097686374 Wind Farm: E17, Redistributed Forecast: 61.696658097686374 Wind Farm: E18, Redistributed Forecast: 30.848329048843187 Wind Farm: E19, Redistributed Forecast: 92.54498714652956 Wind Farm: E20, Redistributed Forecast: 92.54498714652956 Wind Farm: E21, Redistributed Forecast: 30.848329048843187 Wind Farm: E22, Redistributed Forecast: 30.848329048843187 Wind Farm: E23, Redistributed Forecast: 61.696658097686374 Wind Farm: E24, Redistributed Forecast: 92.54498714652956 Wind Farm: N1, Redistributed Forecast: 123.39331619537275 Wind Farm: N2, Redistributed Forecast: 246.7866323907455 Wind Farm: N3, Redistributed Forecast: 308.48329048843186 Wind Farm: N4, Redistributed Forecast: 61.696658097686374 Wind Farm: N5, Redistributed Forecast: 123.39331619537275 Wind Farm: N6, Redistributed Forecast: 92.54498714652956 Wind Farm: N7, Redistributed Forecast: 246.7866323907455 Wind Farm: N8, Redistributed Forecast: 30.848329048843187

Wind Farm: N9, Redistributed Forecast: 123.39331619537275

Wind Farm: N10, Redistributed Forecast: 154.24164524421593 Wind Farm: N11, Redistributed Forecast: 185.08997429305913 Wind Farm: N12, Redistributed Forecast: 154.24164524421593 Wind Farm: N13, Redistributed Forecast: 154.24164524421593 Wind Farm: N14, Redistributed Forecast: 154.24164524421593 Wind Farm: N15, Redistributed Forecast: 92.54498714652956 Wind Farm: N16, Redistributed Forecast: 61.696658097686374 Wind Farm: N17, Redistributed Forecast: 61.696658097686374 Wind Farm: N18, Redistributed Forecast: 61.696658097686374 Wind Farm: N19, Redistributed Forecast: 61.696658097686374 Wind Farm: N20, Redistributed Forecast: 92.54498714652956 Wind Farm: N21, Redistributed Forecast: 154.24164524421593 Wind Farm: N22, Redistributed Forecast: 215.9383033419023 Wind Farm: N23, Redistributed Forecast: 308.48329048843186 Wind Farm: N24, Redistributed Forecast: 30.848329048843187 Wind Farm: N25, Redistributed Forecast: 30.848329048843187 Wind Farm: N26, Redistributed Forecast: 246.7866323907455 Wind Farm: W1, Redistributed Forecast: 154.24164524421593 Wind Farm: W2, Redistributed Forecast: 61.696658097686374 Wind Farm: W3, Redistributed Forecast: 92.54498714652956 Wind Farm: W4, Redistributed Forecast: 92.54498714652956 Wind Farm: W5, Redistributed Forecast: 123.39331619537275 Wind Farm: W6, Redistributed Forecast: 61.696658097686374 Wind Farm: W7, Redistributed Forecast: 61.696658097686374 Wind Farm: W8, Redistributed Forecast: 30.848329048843187 Wind Farm: W9, Redistributed Forecast: 92.54498714652956 Wind Farm: W10, Redistributed Forecast: 61.696658097686374 Wind Farm: W11, Redistributed Forecast: 92.54498714652956 Wind Farm: W12, Redistributed Forecast: 123.39331619537275 Wind Farm: W13, Redistributed Forecast: 30.848329048843187

Wind Farm: W14, Redistributed Forecast: 92.54498714652956

Wind Farm: W15, Redistributed Forecast: 123.39331619537275

Wind Farm: S1, Redistributed Forecast: 92.54498714652956

Wind Farm: S2, Redistributed Forecast: 92.54498714652956

Wind Farm: S3, Redistributed Forecast: 215.9383033419023

Wind Farm: S4, Redistributed Forecast: 61.696658097686374

Wind Farm: S5, Redistributed Forecast: 30.848329048843187

Wind Farm: S6, Redistributed Forecast: 215.9383033419023

Wind Farm: S7, Redistributed Forecast: 61.696658097686374

Wind Farm: S8, Redistributed Forecast: 30.848329048843187

Wind Farm: S9, Redistributed Forecast: 30.848329048843187

Wind Farm: S10, Redistributed Forecast: 123.39331619537275

Wind Farm: S11, Redistributed Forecast: 123.39331619537275

Wind Farm: S12, Redistributed Forecast: 61.696658097686374

Wind Farm: S13, Redistributed Forecast: 30.848329048843187

Wind Farm: S14, Redistributed Forecast: 92.54498714652956

Wind Farm: S15, Redistributed Forecast: 123.39331619537275

Wind Farm: S16, Redistributed Forecast: 154.24164524421593

Wind Farm: S17, Redistributed Forecast: 308.48329048843186

Wind Farm: S18, Redistributed Forecast: 246.7866323907455

Wind Farm: S19, Redistributed Forecast: 61.696658097686374

Wind Farm: S20, Redistributed Forecast: 61.696658097686374

Wind Farm: S21, Redistributed Forecast: 123.39331619537275

Wind Farm: S22, Redistributed Forecast: 246.7866323907455

Wind Farm: S23, Redistributed Forecast: 30.848329048843187

Wind Farm: S24, Redistributed Forecast: 308.48329048843186

Wind Farm: S25, Redistributed Forecast: 370.17994858611826

Wind Farm: S26, Redistributed Forecast: 61.696658097686374

Wind Farm: S27, Redistributed Forecast: 246.7866323907455

Wind Farm: S28, Redistributed Forecast: 215.9383033419023

Wind Farm: S29, Redistributed Forecast: 277.63496143958866

Wind Farm: S30, Redistributed Forecast: 185.08997429305913

Wind Farm: S31, Redistributed Forecast: 154.24164524421593

Wind Farm: S32, Redistributed Forecast: 92.54498714652956

Wind Farm: S33, Redistributed Forecast: 123.39331619537275

Wind Farm: S34, Redistributed Forecast: 30.848329048843187

Wind Farm: S35, Redistributed Forecast: 215.9383033419023

**Total Redistributed Forecast: 12000.0**