***EXPT1 AI:-***

Problem Statement:

weather condition predictor:

1. Performance Measure:

- Accuracy of weather predictions.

- Timeliness in providing forecasts.

- Ability to detect and alert for severe weather events (e.g., storms, hurricanes, heatwaves).

- Precision in predicting specific weather parameters (temperature, precipitation, wind speed).

2. Environment:

- Earth's atmosphere and various weather phenomena.

- Meteorological data sources, including satellite imagery, weather stations, and atmospheric sensors.

- Changing and dynamic atmospheric conditions.

3. Actuators:

- Weather forecasting models and algorithms.

- Communication systems for disseminating weather information.

- Integration with automated systems for emergency response and resource allocation.

4. Sensors:

- Satellite data for observing cloud cover and atmospheric patterns.

- Ground-based weather stations for measuring temperature, humidity, and air pressure.

- Radar and lidar for monitoring precipitation and wind patterns.