Session 3

Using of digital literacy skills, create and interpret weather records

STEPS IN CREATING AND INTERPRETING WEATHER RECORDS

1. Collecting Weather Data

- **Instruments**: Use weather instruments like thermometers (temperature), barometers (air pressure), anemometers (wind speed), hygrometers (humidity), and rain gauges (precipitation).
- **Location**: Establish a weather station in a specific area, ensuring data is collected consistently at the same time each day (e.g., every 6 hours or daily at a set hour).
- **Data Logging**: Record observations manually or digitally in a weather logbook or using a weather database.

2. Organizing the Data

- **Time Frame**: Ensure the data spans a relevant time period (daily, monthly, yearly).
- Data Format: Create a table to organize key parameters such as:
 - □ Date/Time
 - □ Temperature (max/min)
 - □ Wind Speed and Direction
 - □ Humidity
 - □ Air Pressure
 - □ Precipitation (rain/snow)
- Example:

Date	Temp (°C)	Wind Speed (km/h)	Humidity (%)	Precipitation (mm)
2025-02- 01	23/15	12	70	5.0
2025-02- 02	22/14	8	68	0.0

3. Analyzing the Data

- **Temperature Trends**: Identify patterns of warming/cooling.
- **Precipitation Analysis**: Track rain/snow and calculate averages (e.g., month-ly rainfall totals).
- Wind and Pressure Patterns: Monitor changes in wind speed/direction and atmospheric pressure to identify weather systems like storms or high-pressure

areas.

4. Interpreting Weather Records

- **Seasonal Trends**: Compare the data to past seasons to spot anomalies (e.g., hotter than usual, dryer than expected).
- **Statistical Analysis**: Calculate averages (mean), extremes (maximum/minimum), and variability (standard deviation).
- **Correlation with Events**: Link weather patterns to real-world events (e.g., increased rainfall leading to floods or droughts).

5. Reporting and Using the Data

- **Forecasting**: Use past data to predict future weather. Meteorologists use historical records to build weather models.
- **Decision Making**: Weather records help in agriculture, planning for natural disasters, energy usage, etc.

Assessment: Using your laptop or smartphone, create a weather record table with elements against the days. Record the findings for one week and interpret the records and save on your SST folder.