Code :

```
#include <iostream>
#include <string>
#include <vector>
#include <ctime>
#include <cstdlib>

Using namespace std;

// Enum for weather conditions
Enum Weather {
   SUNNY,
   CLOUDY,
   RAINY,
   SNOWY
};

// Struct for weather data
Struct WeatherData {
   String location;
   Weather condition;
   Int temperature;
   Int humidity;
};

// Function to generate random weather data
WeatherData generateWeatherData(string location) {
   WeatherData data;
   Data.location = location;
   Data.condition = (Weather)(rand() % 4); // Random weather condition
   Data.temperature = (rand() % 30) + 20; // Random temperature between 20-50
   Data.humidity = (rand() % 100); // Random humidity
   Return data;
}

// Function to display weather data
Void displayWeatherData(WeatherData data) {
   Cout << “Location: “ << data.location << endl;
   Cout << “Weather: “;
   Switch (data.condition) {
      Case SUNNY:
         Cout << “Sunny” << endl;
         Break;
      Case CLOUDY:
         Cout << “Cloudy” << endl;
         Break;
      Case RAINY:
         Cout << “Rainy” << endl;
         Break;
```

```
      Case SNOWY:
         Cout << “Snowy” << endl;
         Break;
   }
   Cout << “Temperature: “ << data.temperature << “°C” << endl;
   Cout << “Humidity: “ << data.humidity << “%” << endl;
}

// Function to simulate weather forecasting
Void simulateWeatherForecasting() {
   Vector<string> locations = {“New York”, “Los Angeles”, “Chicago”, “Houston”};
   For (string location : locations) {
      WeatherData data = generateWeatherData(location);
      displayWeatherData(data);
      cout << endl;
   }
}

Int main() {
   Srand(time(0)); // Seed random number generator
   simulateWeatherForecasting();
   return 0;
}
```

Output:

Location: New York

Weather: Snowy

Temperature: 27°C

Humidity: 17%

Location: Los Angeles

Weather: Snowy

Temperature: 44°C

Humidity: 49%

Location: Chicago

Weather: Sunny

Temperature: 22°C

Humidity: 27%

Location: Houston

Weather: Snowy

Temperature: 20°C

Humidity: 96%