**Problem statement:**

There are thousands of commercial, military, and local airports in the US and around the world. The International Civil Aviation Organization maintains a database of current and inactive airports around the world. The database uniquely identifies each airport by an alphanumeric GPS code. Further, each record contains the following pieces of data on each airport:

• The name of the airport Hack 11.0 .

• Its latitude in degrees in the range [−90, 90] with negative values corresponding to the southern hemisphere

• Its longitude in degrees in the range [−180, 180] with negative values corresponding to the western hemisphere

• The type of airport

• Its elevation in (whole) feet above sea level

• Its municipality and its country You will design a C structure to encapsulate these attributes to model an airport record from the ICAO database. You will also design several functions to support your structure including factory functions, functions to create a string representation, print records, etc. You will also implement several utility functions that use your structure to compute the air distance(s) between airport locations using their latitude and longitude. Recall that the air distance d between two latitude/longitude points can be estimated using the Spherical Law of Cosines.

A screenshot of a social media post

Description automatically generated