Exam Preparation I

01. EcoLife Data Reconstruction

You can check your solutions in Judge.

Welcome to the **EcoLife Project**! We focus on detailed analysis of wildlife ecosystems. Due to technical issues, our wildlife database has become disorganized. Properly structured and comprehensive data are crucial for understanding wildlife and supporting conservation efforts. The scrambled data includes essential information about different species.
You will be provided information on **7 wildlife species**. Each entry includes the species' **ID**, **name**, **habitat**, **lifespan**, **diet**, and **migration patterns**. You need to organize it. The details are presented in a **sentence format**:

1. "Species ID **9501** is the **Grey Wolf**, inhabiting the **Forest**. It has a lifespan of **8** years. Its diet includes **Rodents**, **Ungulates** and **Berries**. Migrations: **Long-range**."
2. "The **Humpback Whale**, species ID **9502**, is found in the **Ocean**, with a lifespan of **45** years. Its diet consists of **Krill**, **Fish** and **Plankton**. Migrations: **Ocean crossing**."
3. "Identified as species ID **9503**, the **African Elephant** resides in the **Savannah** and has a lifespan of **65** years. Its diet is composed of **Grass**, **Roots** and **Fruits**. Migrations: **Water tracking**."
4. "The **Bald Eagle**, with species ID **9504**, lives in the **Forest**, with a lifespan of **20** years. It feeds on **Fish**, **Carrion** and **Mammals**. Migrations: **Lake fishing**."
5. "Species ID **9505**, the **Giant Panda**, lives in the **Forest** and has a lifespan of **20** years. Its diet mainly includes **Bamboo**, **Shoots** and **Leaves**. Migrations: **Elevation shifts**."
6. "The **Monarch Butterfly**, species ID **9506**, primarily found in the **Meadow**, has a lifespan of **1** year. It feeds on **Nectar**, **Milkweed** and **Pollen**. Migrations: **Mass migration**."
7. "Species ID **9507**, the **Red Kangaroo**, native to **Grassland** areas, has a lifespan of **12** years. Its diet includes **Grass**, **Shrubs** and **Leaves**. Migrations: **Drought escape**."

Convert the scrambled data into **structured JSON format manually:**

- **Use a text or a code editor** to write the JSON document. We recommend **Notepad++ or VS Code**.
- **Extract relevant details** from each species' description.
- **Organize the data** into a structured JSON format.
- **Each wildlife species record** in the JSON document should include **the following attributes**:
  - **speciesId: Integer** (A unique identifier for each species)
  - **speciesName: String** (The name of the species)
  - **habitat: String** (The primary ecosystem where the species is typically found)
  - **lifespan: Integer** (The average lifespan of the species, in years)
  - **habits: Object** This object will have two fields:
    - **diet: Array of Strings** (Three words, primary diet components of the species)
    - **migration: String** (Two-word description of the species' migration pattern)

You are provided with a **JSON parser application**. Use it to **parse and validate** the JSON file you have created.

- **Replace the content of Spieces.json** with the JSON data you created.
- After pasting your JSON data into the coresponding JSON file, **make sure to save any changes**.
- **Run the parser** application within your IDE.
- **The parser will process the chosen JSON file** and display the extracted data **in the console**.

- Carefully review the output in the console.
- If the parser displays an error message, check your JSON file for any syntax errors or formatting issues.
- Ensure all required keys are present and correctly named.
- **Copy the results from the console into the Judge System.**

  *Use Ctrl + C to copy from the console.