ANSIBLE YAML FILE - DATA TYPES

YAML (short for **YAML Ain't Markup Language**) is a human-readable data serialization standard often used for configuration files, data exchange, and programming tasks. YAML provides a simple way to structure data and is widely used because of its readability and ease of use.

Key Features of YAML:

1. **Human-Readable:** It uses indentation and plain text, making it easy to read and write.
2. **Hierarchical Structure:** It organizes data into nested structures using indentation.
3. **Supports Multiple Data Types:** Scalars (strings, numbers), lists, and key-value mappings (dictionaries).
4. **Comment Support:** You can add comments using the # symbol.

Syntax Basics:

1. **Key-Value Pair:**

```
name: Kavitha

location: Chennai
```

2. **Lists:**

```
games:

 - Football

 - Basketball

 - Tennis
```

3. **Nested Structures:**

```
person:
  name: Priya
  contact: 1234567890
  email: admin@gmail.com
```

4. **Mappings**:

```
person:
  name: Alice
  age: 30
  city: New York
```

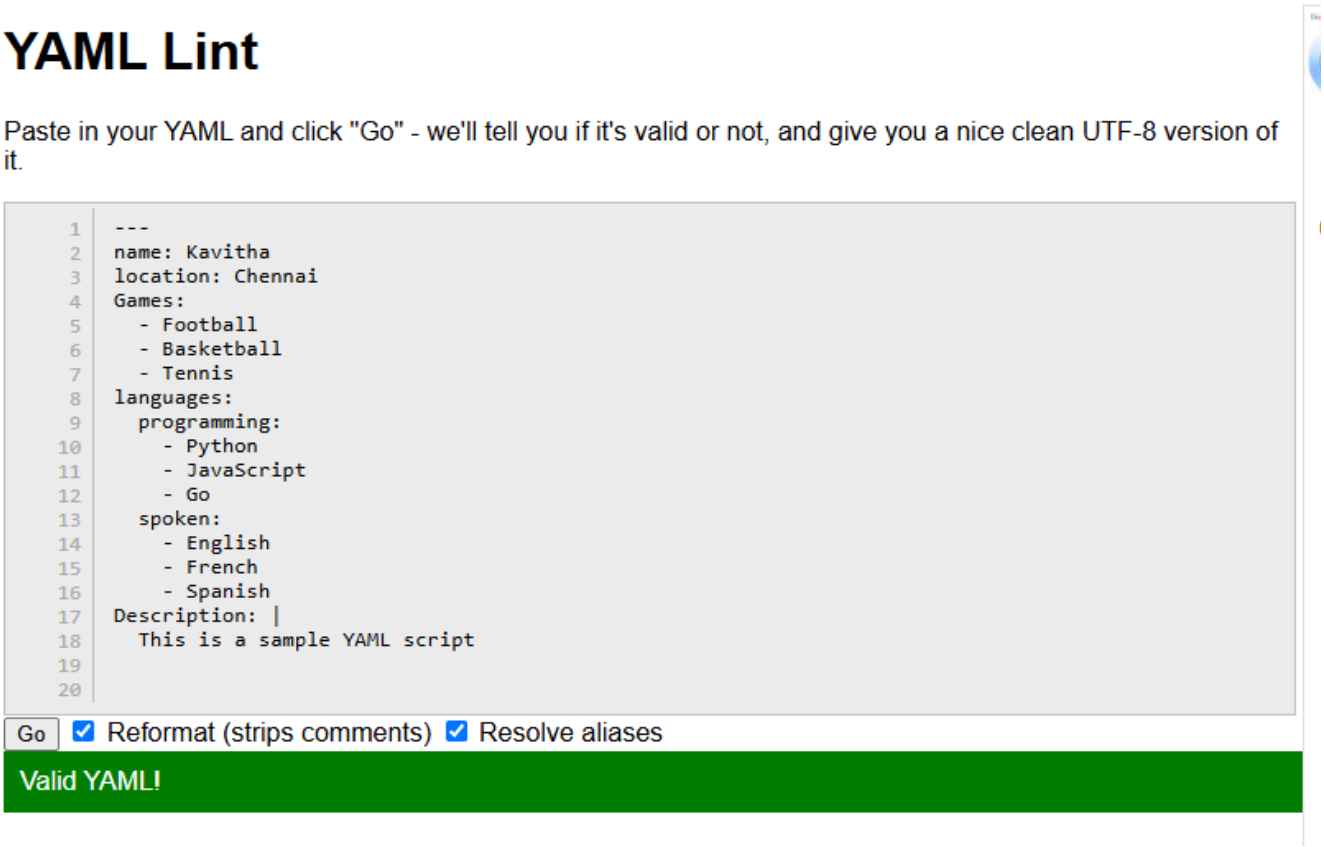
5**. Comments:**

```
# This is a comment
environment: production
```

6. **Multi_line scalar:**

```
Description: |
  This is a sample YAML script
```

YAML Script Validated by using YAML Lint



Advantages of YAML:

- **Readable:** Intuitive for humans compared to JSON or XML.
- **Lightweight:** Easy to parse and integrate with applications.
- **Flexible:** Supports complex nested structures.

Common Use Cases in DevOps:

- Writing Kubernetes manifests.
- Defining Ansible playbooks.
- Configuring GitHub Actions or GitLab CI/CD pipelines.
- Creating AWS CloudFormation templates for provisioning resources.