

JSON Roundtrip

Background

Data serialization allows structured information to be converted into a text format suitable for storage or transmission. One common format is JSON (JavaScript Object Notation). In this task, you will perform serialization and deserialization of a Python dictionary using JSON and verify the consistency of the process.

Task

You are provided with a dictionary representing a user profile. Your task is to:

1. Serialize the dictionary to a JSON string using Python's ``json.dumps()``.
2. Deserialize the JSON string back into a dictionary using ``json.loads()``.
3. Compare both the JSON string and the reconstructed dictionary to expected results.
4. Print two specific output messages depending on whether the values match or not.

Input

There is no input to be read. The dictionary is fixed as follows:

```
{
    "name": "Alice",
    "age": 30,
    "is_admin": True,
    "skills": ["Python", "Network Programming", "Digital Forensics"]
}
```

Example output

The JSON strings match. {"name": "Alice", "age": 30, "is_admin": true, "skills": ["Python", "Network Programming", "Digital Forensics"]} {"name": "Alice", "age": 30, "is_admin": true, "skills": ["Python", "Network Programming", "Digital Forensics"]}

The dictionaries match. {'name': 'Alice', 'age': 30, 'is_admin': True, 'skills': ['Python', 'Network Programming', 'Digital Forensics']} {'name': 'Alice', 'age': 30, 'is_admin': True, 'skills': ['Python', 'Network Programming', 'Digital Forensics']}

Implementation guide

Implement the following functions:

```
def json_to_variable(data):
    # Returns JSON string
    pass

def unjson_from_variable(json_data):
    # Returns reconstructed dictionary
    pass
```

Then write a main function that:

1. Serializes ``test_data`` using ``json_to_variable()``.

2. Deserializes the result using ``unjson_from_variable()``.
3. Prints the two required messages.