

Pickle Match

Background

Serialization is the process of converting a data structure into a format that can be easily stored or transmitted. In Python, one such method is pickling using the `pickle` module. This challenge involves verifying whether the pickled and unpickled data remain consistent with the original structure.

Task

Given a predefined dictionary structure, your task is to:

1. Serialize (pickle) the data using Python's `pickle.dumps()`.
2. Deserialize (unpickle) the data using `pickle.loads()`.
3. Compare both the serialized byte string and the deserialized object with expected values.

Input

There is no input from the user. The dictionary to be tested is hardcoded as:

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

Output

Your program must produce exactly two lines of output:

1. The result of comparing the byte string from your custom `pickle_to_variable()` function and a reference pickled version.
2. The result of comparing the unpickled result with the original dictionary.

Sample output

```
The byte strings match. b'\x80\x04\x95h\x00\x00\x00\x00\x00\x00}\x94(\x8c\x04name\x94\x8c\x05Alice\x94\x8c\x03age\x94K\x1e\x8c\x08is_admin\x94\x88\x8c\x06skills\x94]\x94(\x8c\x06Python\x94\x8c\x13Network Programming\x94\x8c\x11Digital Forensics\x94eu.' b'\x80\x04\x95h\x00\x00\x00\x00\x00\x00}\x94(\x8c\x04name\x94\x8c\x05Alice\x94\x8c\x03age\x94K\x1e\x8c\x08is_admin\x94\x88\x8c\x06skills\x94]\x94(\x8c\x06Python\x94\x8c\x13Network Programming\x94\x8c\x11Digital Forensics\x94eu.'
```

```
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']}
```

Evaluation

Your submission will be tested with Python 3 and must implement the following:

```
def pickle_to_variable(data):  
    # Serialize and return bytes  
    pass
```

```
def unpickle_from_variable(pickled_data):  
    # Deserialize and return dictionary  
    pass
```

Your `main()` function should call both of these and print the two required result lines.