



Python Training.....

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Serialization

- Serialization is a process of converting an object to stream of bytes.
- Helpful for
 - Storing Python Objects to File
 - Sending Python Objects over Network
 - Storing Python Objects into Database
 - Any Python Object can be converted to stream which can be used for Hashing.
- Which Module ?
 - pickle



Pickle -1

Serializing / De-Serializing as String i.e Stream of Bytes :

```
>>> import pickle
```

```
>>> input_dict = {"a":1, "b":2, "c":3}
```

```
>>> serialized_stream = pickle.dumps(input_dict)
```

```
>>> serialized_stream
```

```
"(dp0\nS'a'\nnp1\nl1\nsS'c'\nnp2\nl3\nsS'b'\nnp3\nl2\ns."
```

```
>>> deserialized_stream = pickle.loads(serialized_stream)
```

```
>>> deserialized_stream
```

```
{'a': 1, 'c': 3, 'b': 2}
```



Pickle -2

Serializing / De-Serializing as String i.e Stream of Bytes :

```
>>> import pickle
>>> input_dict = {"a":1, "b":2, "c":3}
>>> fd = open("serialize.out", "wb")
>>> pickle.dump(input_dict, fd)
>>> input_dict = {"c":1, "d":2, "e":3}
>>> pickle.dump(input_dict, fd)
>>> fd.close()
>>> fd = open("serialize.out", "rb")
>>> deserialized_stream = pickle.load(fd)
>>> deserialized_stream
{'a': 1, 'c': 3, 'b': 2}
>>> deserialized_stream = pickle.load(fd)
>>> deserialized_stream
{'c': 1, 'd': 2, 'e': 3}
```