

[illegible]

Name	Memcache: Pymemcache
URL	https://www.attackdefense.com/challengedetails?cid=221
Type	Infrastructure Attacks: Memcached

Important Note: This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic. Also, note that the IP addresses and domain names might be different in your lab.

Q1. What is the data stored with key “user”?

Answer: joe

Command:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
client.get("user")
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));print client.get("user");'
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));print client.get("user");'
joe
student@attackdefense:~$
```

Q2. What is the value of complex number stored in key “complex”?

Answer: 4+3j

Commands:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
import pickle
pickle.loads(client.get("complex"))
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print pickle.loads(client.get("complex"))'
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print pickle.loads(client.get("complex"))'
(4+3j)
```

Q3. How many keys value pairs are present on the memcache server?

Answer: 9

Commands:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
client.stats()['curr_items']
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211)); print client.stats()["curr_items"]'
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211)); print client.stats()["curr_items"]'
9
```

Q4. What is the flag among the key values pairs in memcache server?

Answer: fl4g_f0r_m3mcach3

Commands:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
import pickle
pickle.loads(client.get("flag"))
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print pickle.loads(client.get("flag"))';'
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print pickle.loads(client.get("flag"))';'
f14g_f0r_m3mcach3
```

Q5. What is the class of data stored in key “fraction”?

Answer: fractions.Fraction

Commands:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
import pickle
type(pickle.loads(client.get("fraction"))["value"])
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print type(pickle.loads(client.get("fraction"))["value"]);'
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pickle; print type(pickle.loads(client.get("fraction"))["value"]);'
<class 'fractions.Fraction'>
student@attackdefense:~$
```

Q6. What are the name of keys present in slab with id 1? (Provide comma separated values)

Answer: id,name,number,password,status,user

Commands:

```
from pymemcache.client.base import Client
client = Client(('localhost', 11211))
import pprint
pp = pprint.PrettyPrinter(indent=4)
pp.pprint(client.stats("cachedump", "1", "100"))
```

Python one-liner:

```
python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pprint; pp = pprint.PrettyPrinter(indent=4); pp.pprint(client.stats("cachedump","1","100"));
```

```
student@attackdefense:~$ python -c 'from pymemcache.client.base import Client; client = Client(("127.0.0.1", 11211));import pprint; pp = pprint.PrettyPrinter(indent=4); pp.pprint(client.stats("cachedump","1","100"));'
{  'id': '[1 b; 0 s]',
   'name': '[6 b; 0 s]',
   'number': '[10 b; 0 s]',
   'password': '[12 b; 0 s]',
   'status': '[6 b; 0 s]'}
student@attackdefense:~$
```

References:

1. Memcached (<https://memcached.org/>)
2. Pymemcache (<https://pypi.org/project/pymemcache/>)