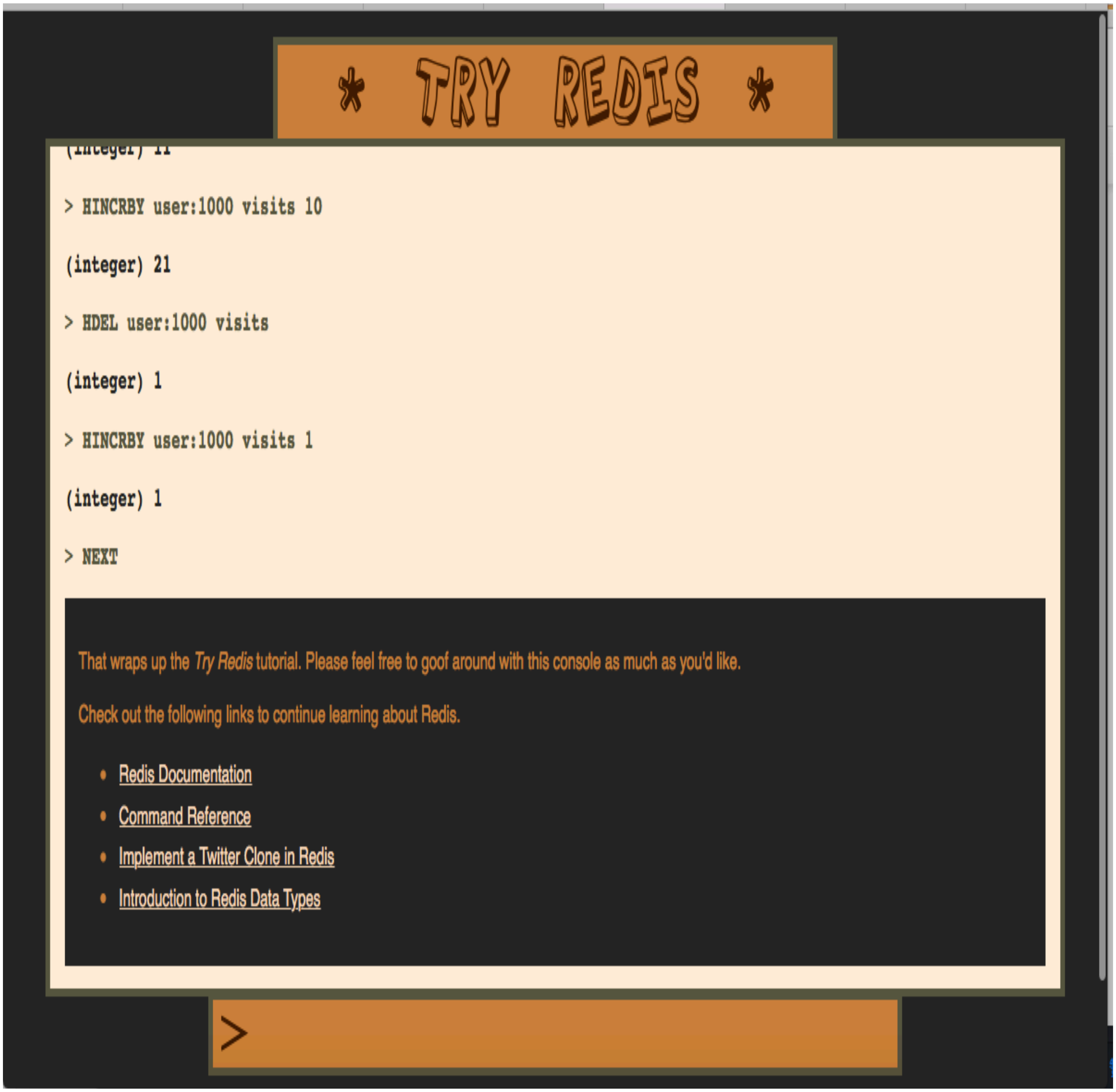
CPSC 473 -01

Assignment 6 Solution

Sarah Alfayez

1. Screenshots of TryRedis: (finishing TryRedis, and the result of keys *)

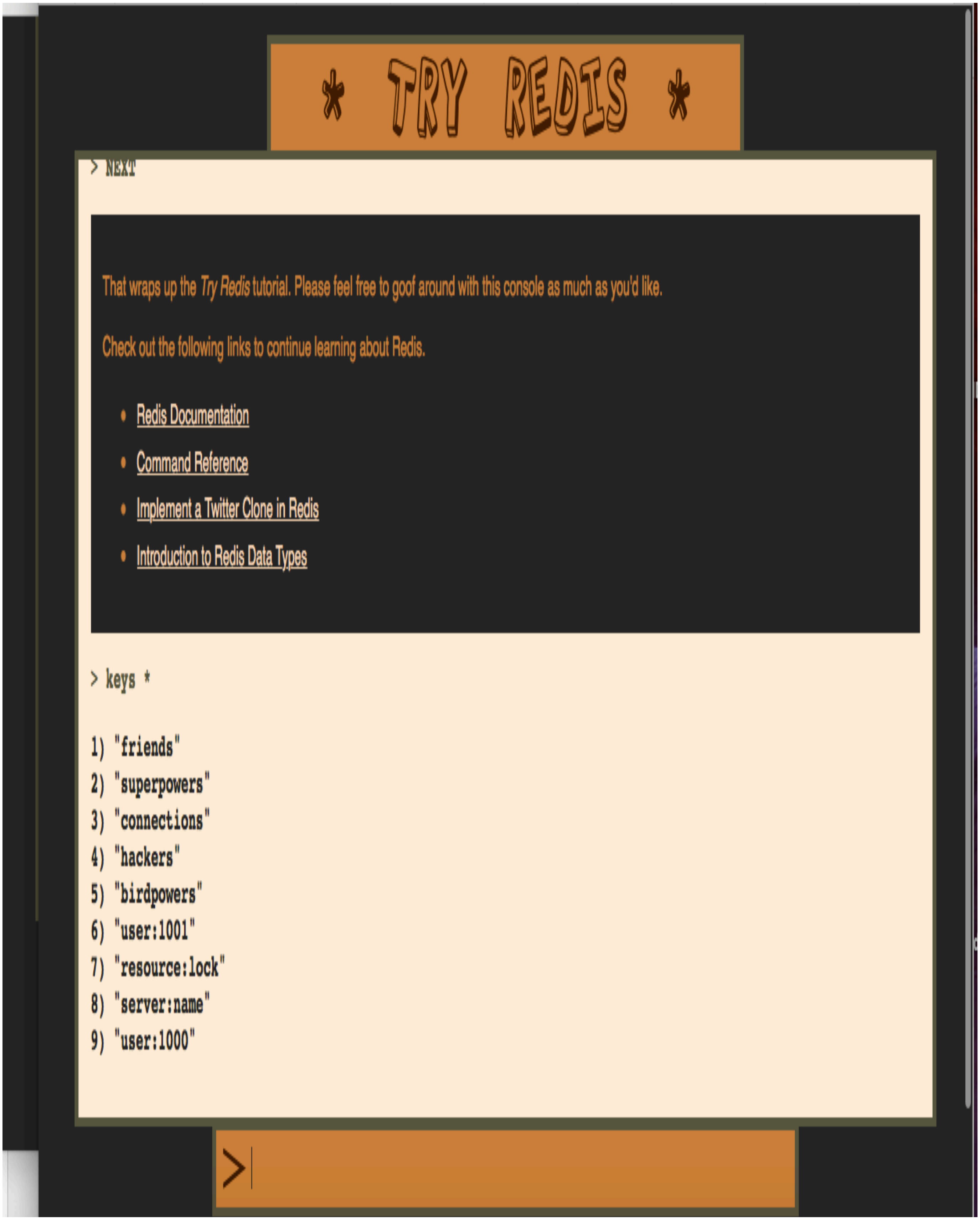


```
(integer) 11

> HINCRBY user:1000 visits 10

(integer) 21

> HDEL user:1000 visits

(integer) 1

> HINCRBY user:1000 visits 1

(integer) 1

> NEXT
```

That wraps up the *Try Redis* tutorial. Please feel free to goof around with this console as much as you'd like.

Check out the following links to continue learning about Redis.

- Redis Documentation
- Command Reference
- Implement a Twitter Clone in Redis
- Introduction to Redis Data Types



```
> NEXT
```

That wraps up the *Try Redis* tutorial. Please feel free to goof around with this console as much as you'd like.

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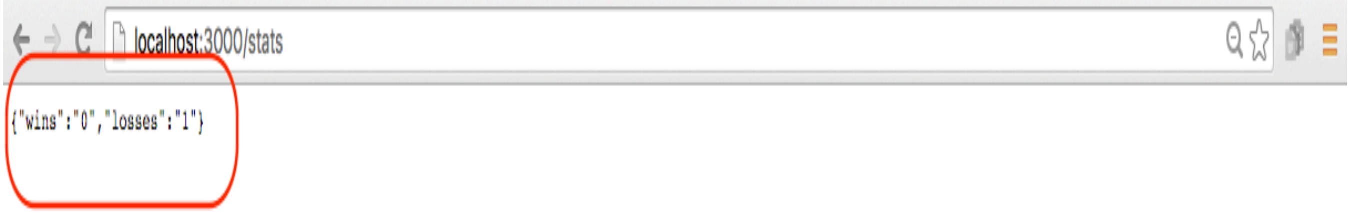
- Redis Documentation
- Command Reference
- Implement a Twitter Clone in Redis
- Introduction to Redis Data Types

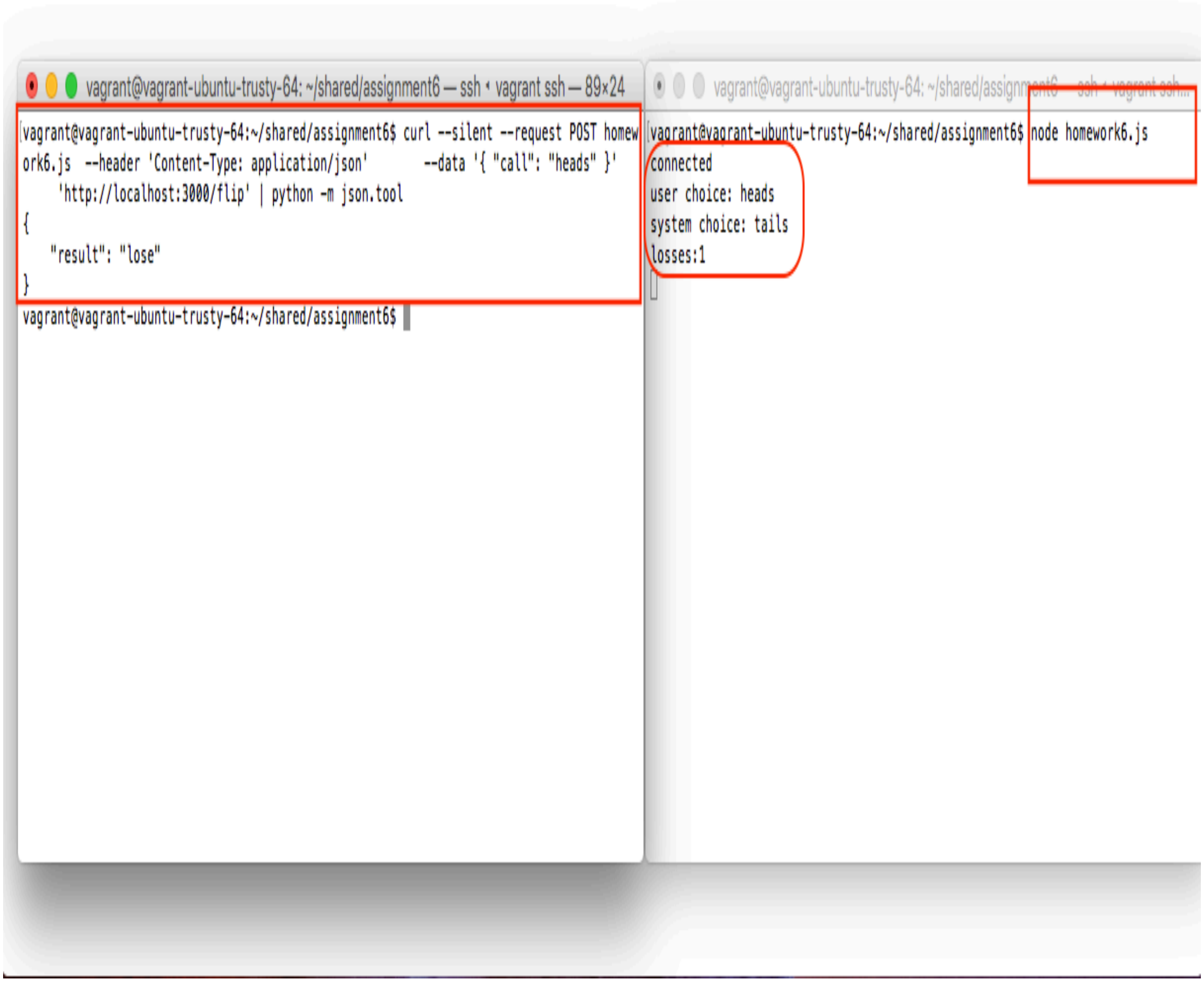
```
> keys *

1) "friends"
2) "superpowers"
3) "connections"
4) "hackers"
5) "birdpowers"
6) "user:1001"
7) "resource:lock"
8) "server:name"
9) "user:1000"
```

2. Screenshots of server in action:
   The first figure shows the initial test with result of a lose



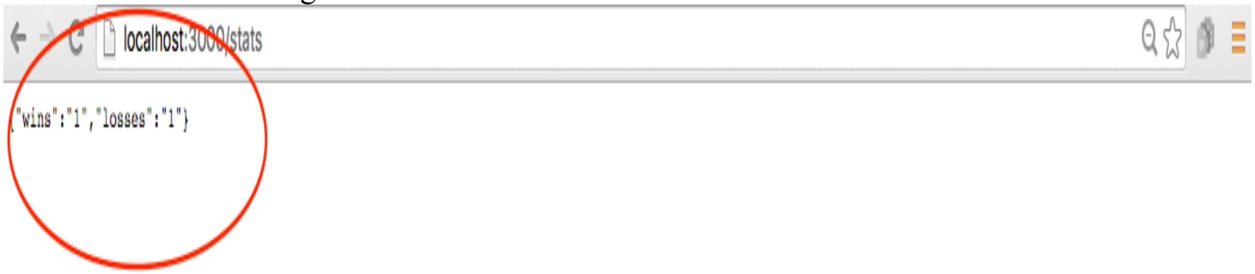
```
{"wins":"0","losses":"1"}
```


vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ‹ vagrant ssh — 89×24
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ‹ vagrant ssh...

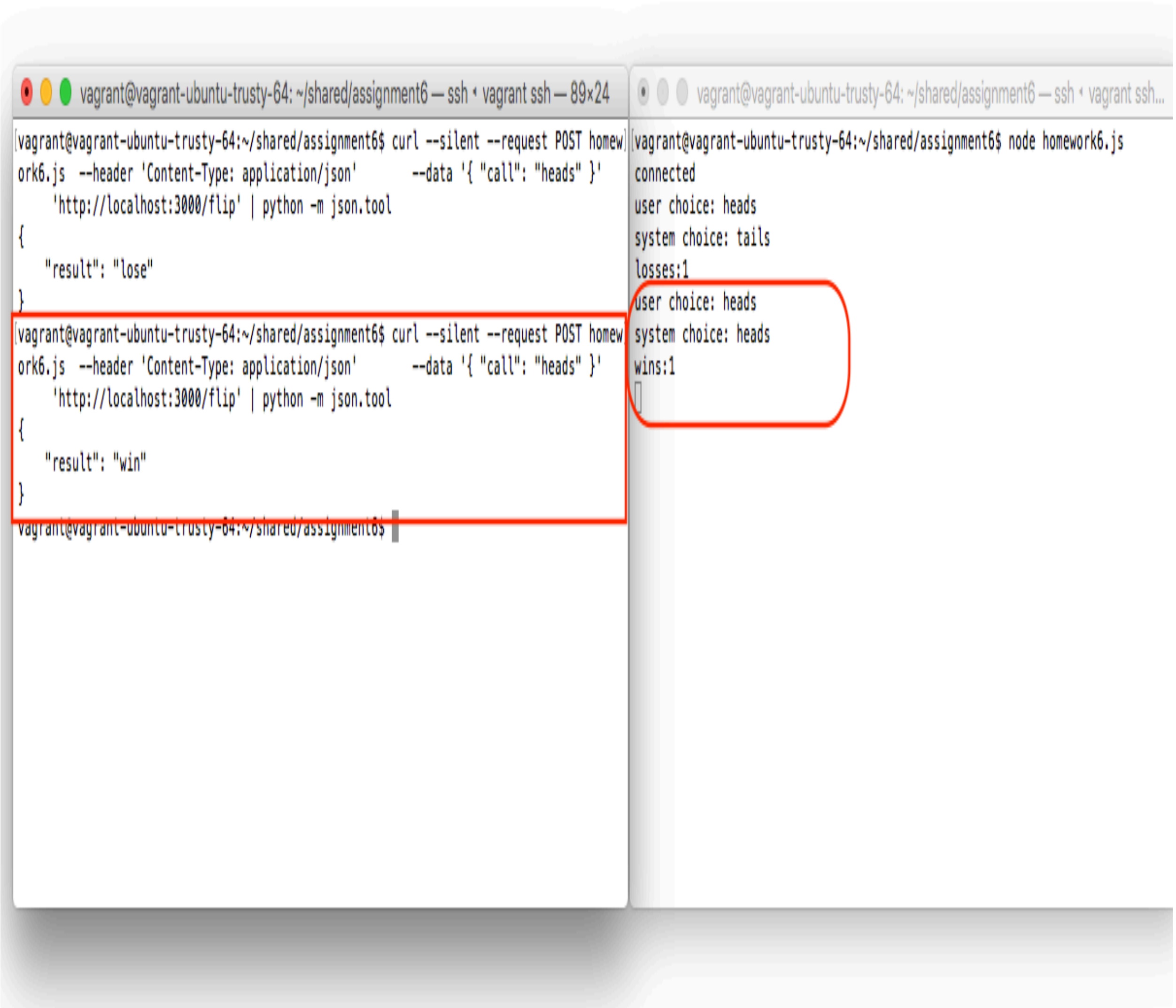
```
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$
```

```
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:1
```

The second and third figure shows the result of a series of tests:



```
{"wins":"1","losses":"1"}
```


vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh — 89×24
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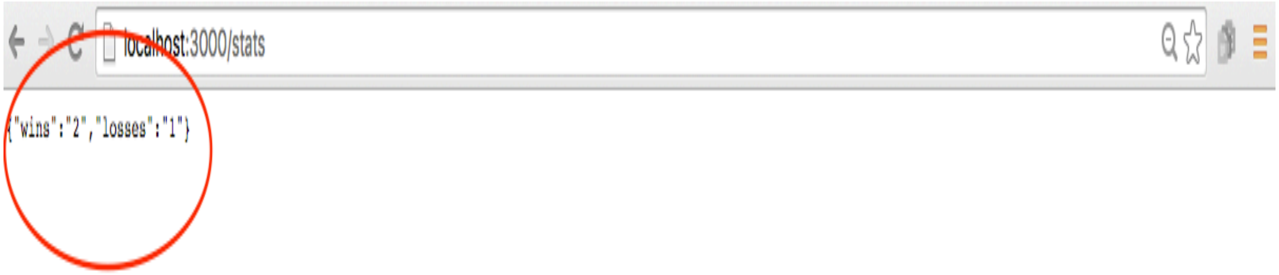
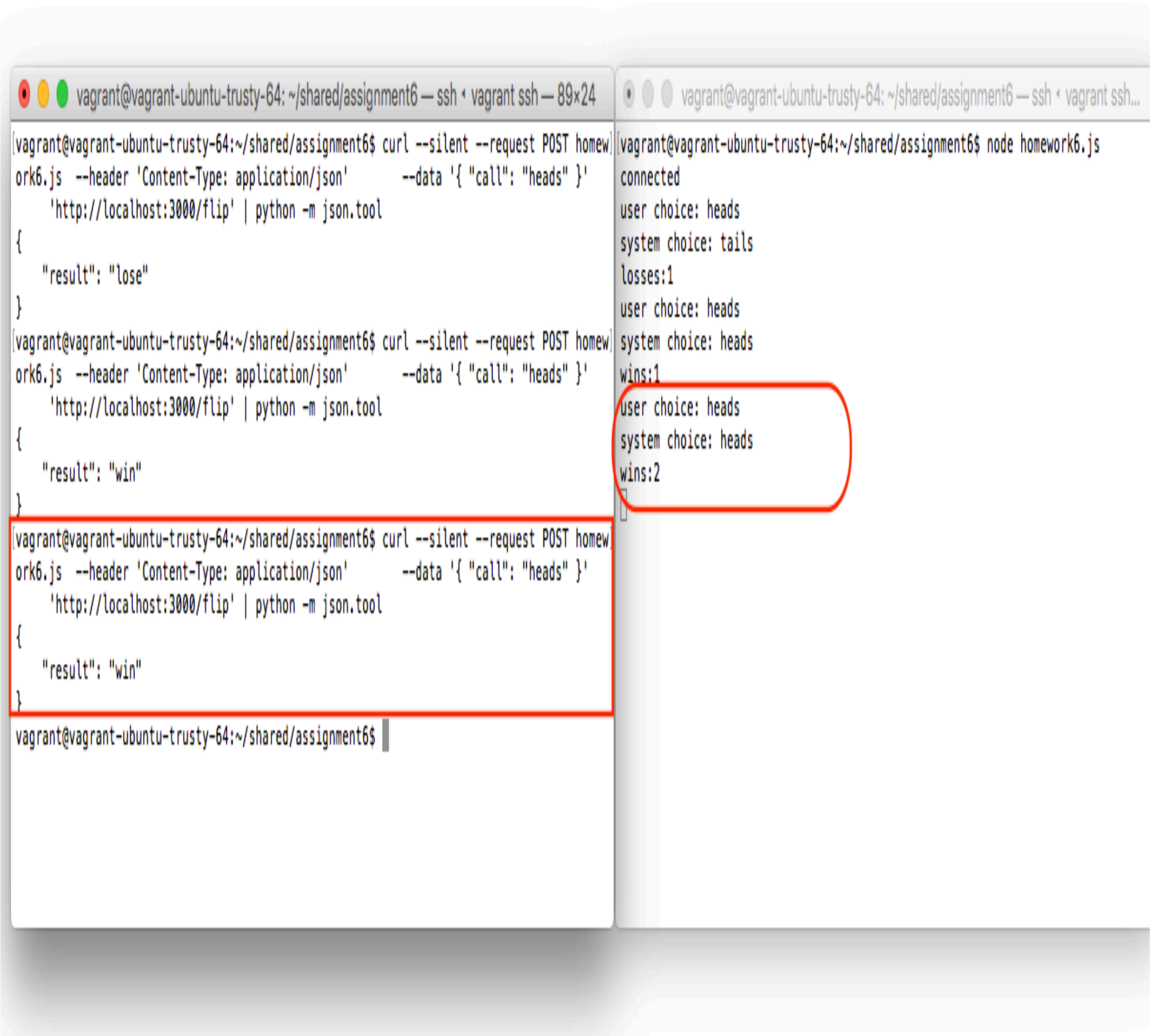
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "win"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$
```

```
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:1
user choice: heads
system choice: heads
wins:1
```



```
{"wins":"2","losses":"1"}
```


vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ‹ vagrant ssh — 89×24
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     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "win"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$
```
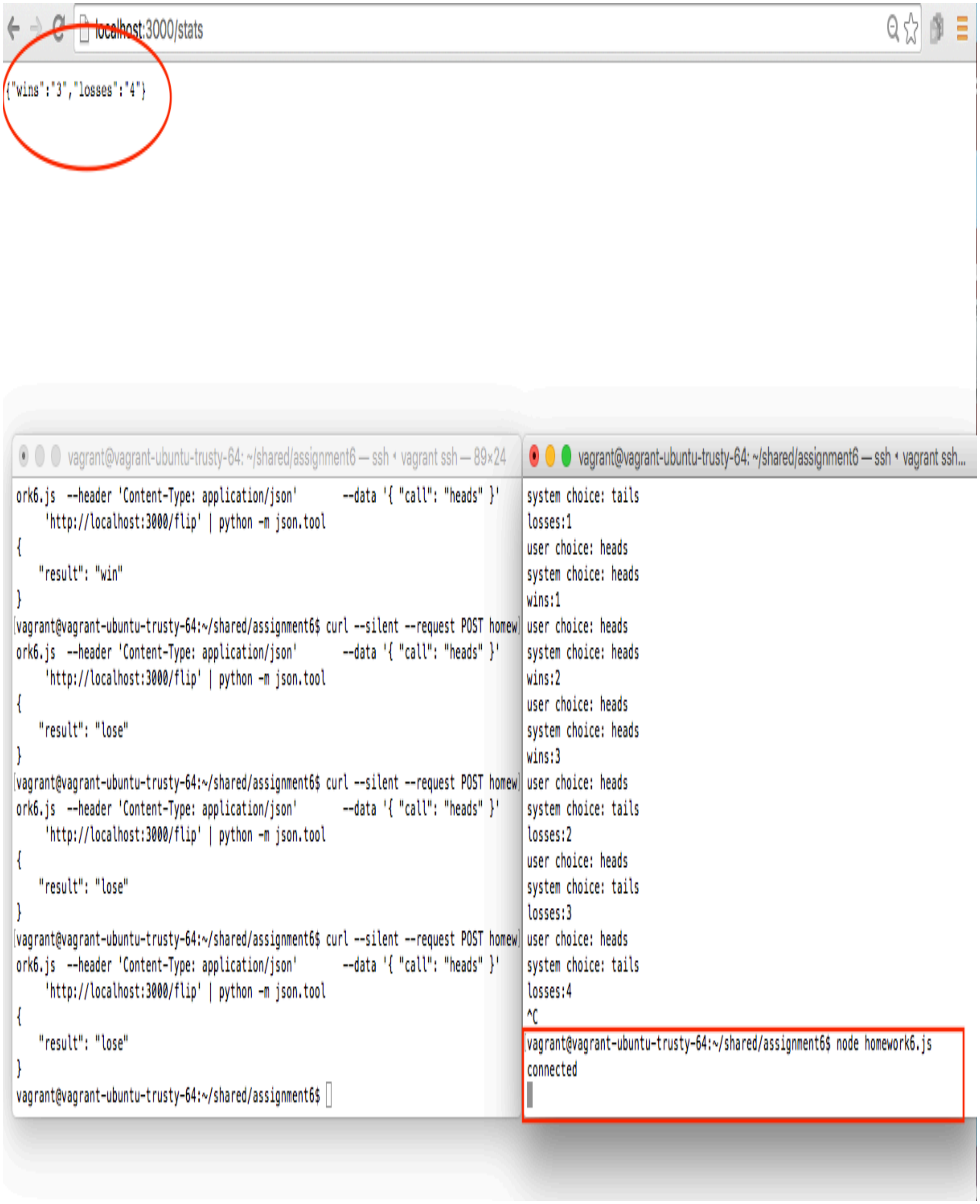

```
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:1
user choice: heads
system choice: heads
wins:1
user choice: heads
system choice: heads
wins:2
```

Figure 4 shows that the results will persist even if we restart node.js


localhost:3000/stats
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh — 89×24
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh...

```
{"wins":"3","losses":"4"}
```

```
ork6.js  --header 'Content-Type: application/json'      --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "win"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
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     'http://localhost:3000/flip' | python -m json.tool
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ork6.js  --header 'Content-Type: application/json'      --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ 
```
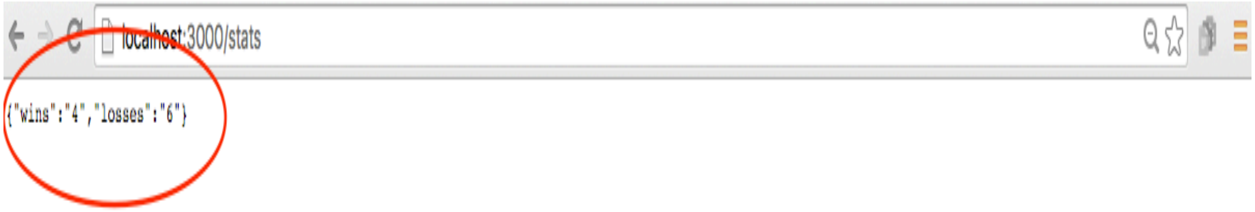
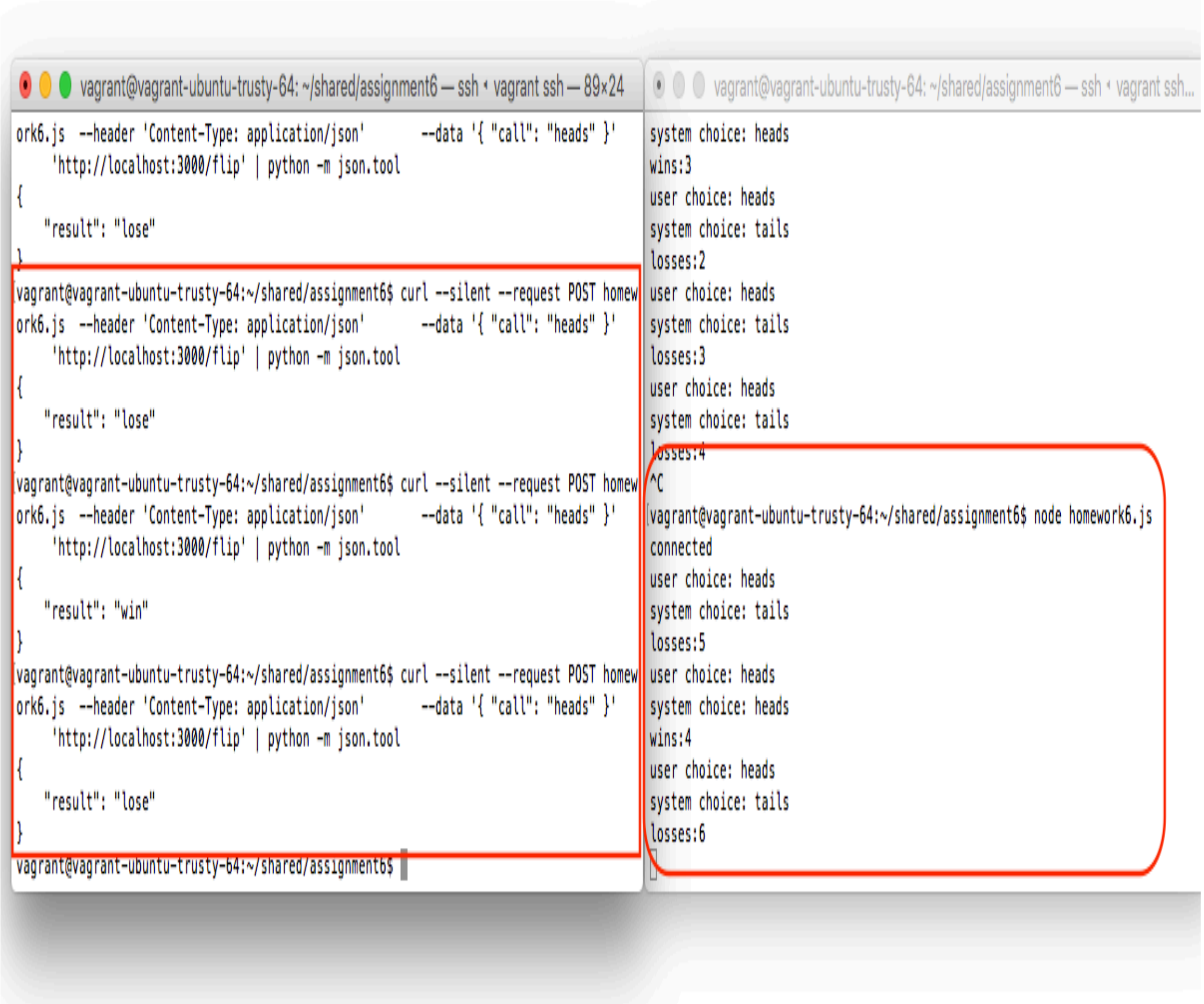

```
system choice: tails
losses:1
user choice: heads
system choice: heads
wins:1
user choice: heads
system choice: heads
wins:2
user choice: heads
system choice: heads
wins:3
user choice: heads
system choice: tails
losses:2
user choice: heads
system choice: tails
losses:3
user choice: heads
system choice: tails
losses:4
^C
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
```

Figure 5 shows the results after restarting node.js



```
{"wins":"4","losses":"6"}
```


vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh — 89×24
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh...

```
ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
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    'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
    'http://localhost:3000/flip' | python -m json.tool
{
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}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
    'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$
```
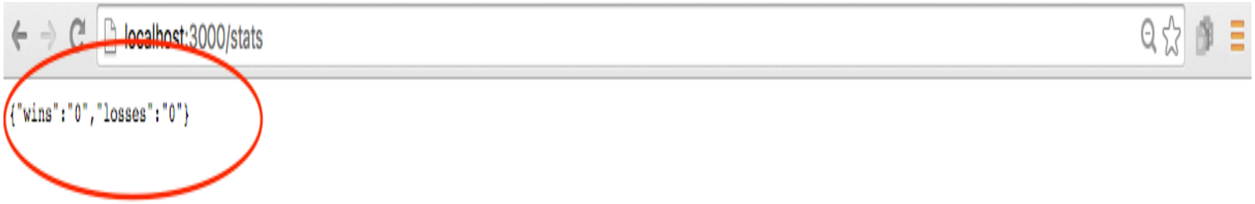
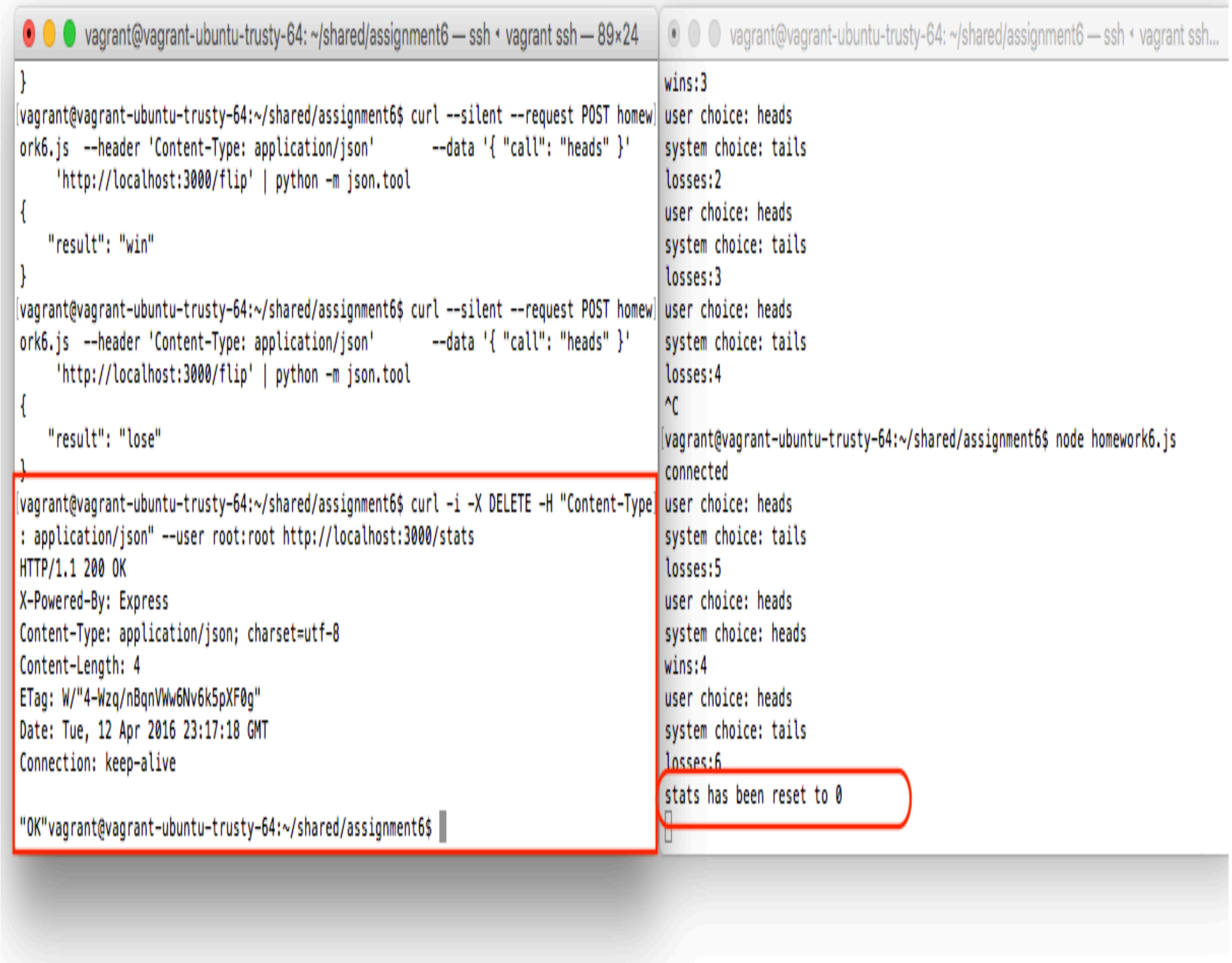

```
system choice: heads
wins:3
user choice: heads
system choice: tails
losses:2
user choice: heads
system choice: tails
losses:3
user choice: heads
system choice: tails
losses:4
^C
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:5
user choice: heads
system choice: heads
wins:4
user choice: heads
system choice: tails
losses:6
```

Figure 6 show the result of running the delete on /stats using the following curl statement

```
curl -i -X DELETE -H "Content-Type: application/json" --user root:root
http://localhost:3000/stats
```



```
{"wins":"0","losses":"0"}
```



vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh — 89×24
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ◂ vagrant ssh...

```
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
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    "result": "win"
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ork6.js  --header 'Content-Type: application/json'       --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl -i -X DELETE -H "Content-Type
: application/json" --user root:root http://localhost:3000/stats
HTTP/1.1 200 OK
X-Powered-By: Express
Content-Type: application/json; charset=utf-8
Content-Length: 4
ETag: W/"4-Wzq/nBqnVWw6Nv6k5pXF0g"
Date: Tue, 12 Apr 2016 23:17:18 GMT
Connection: keep-alive

"OK"vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ ▌
```
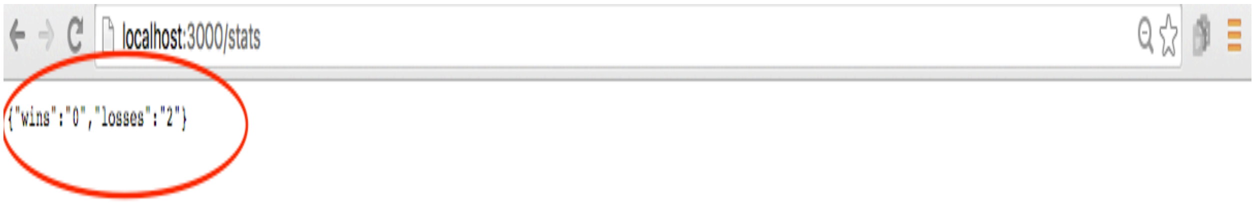
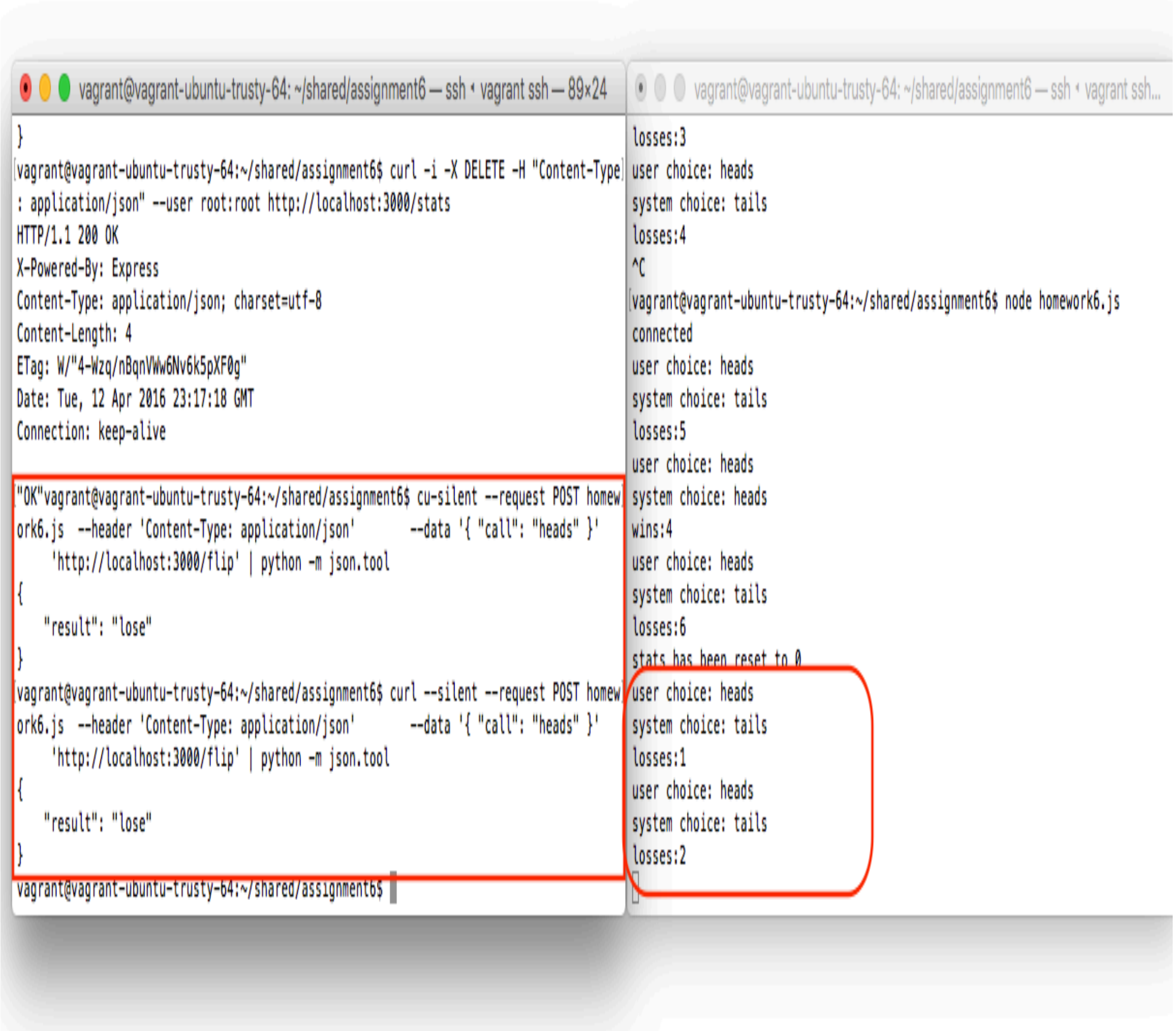

```
wins:3
user choice: heads
system choice: tails
losses:2
user choice: heads
system choice: tails
losses:3
user choice: heads
system choice: tails
losses:4
^C
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:5
user choice: heads
system choice: heads
wins:4
user choice: heads
system choice: tails
losses:6
stats has been reset to 0
▯
```

Figure 7 shows the results after resetting the counters to 0



```
{"wins":"0","losses":"2"}
```


vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ‹ vagrant ssh — 89×24
vagrant@vagrant-ubuntu-trusty-64: ~/shared/assignment6 — ssh ‹ vagrant ssh...

```
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl -i -X DELETE -H "Content-Type
: application/json" --user root:root http://localhost:3000/stats
HTTP/1.1 200 OK
X-Powered-By: Express
Content-Type: application/json; charset=utf-8
Content-Length: 4
ETag: W/"4-Wzq/nBqnVWw6Nv6k5pXF0g"
Date: Tue, 12 Apr 2016 23:17:18 GMT
Connection: keep-alive

"OK"vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ cu-silent --request POST homew
ork6.js  --header 'Content-Type: application/json'      --data '{ "call": "heads" }'
     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ curl --silent --request POST homew
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     'http://localhost:3000/flip' | python -m json.tool
{
    "result": "lose"
}
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ 
```

```
losses:3
user choice: heads
system choice: tails
losses:4
^C
vagrant@vagrant-ubuntu-trusty-64:~/shared/assignment6$ node homework6.js
connected
user choice: heads
system choice: tails
losses:5
user choice: heads
system choice: heads
wins:4
user choice: heads
system choice: tails
losses:6
stats has been reset to 0
user choice: heads
system choice: tails
losses:1
user choice: heads
system choice: tails
losses:2
```