

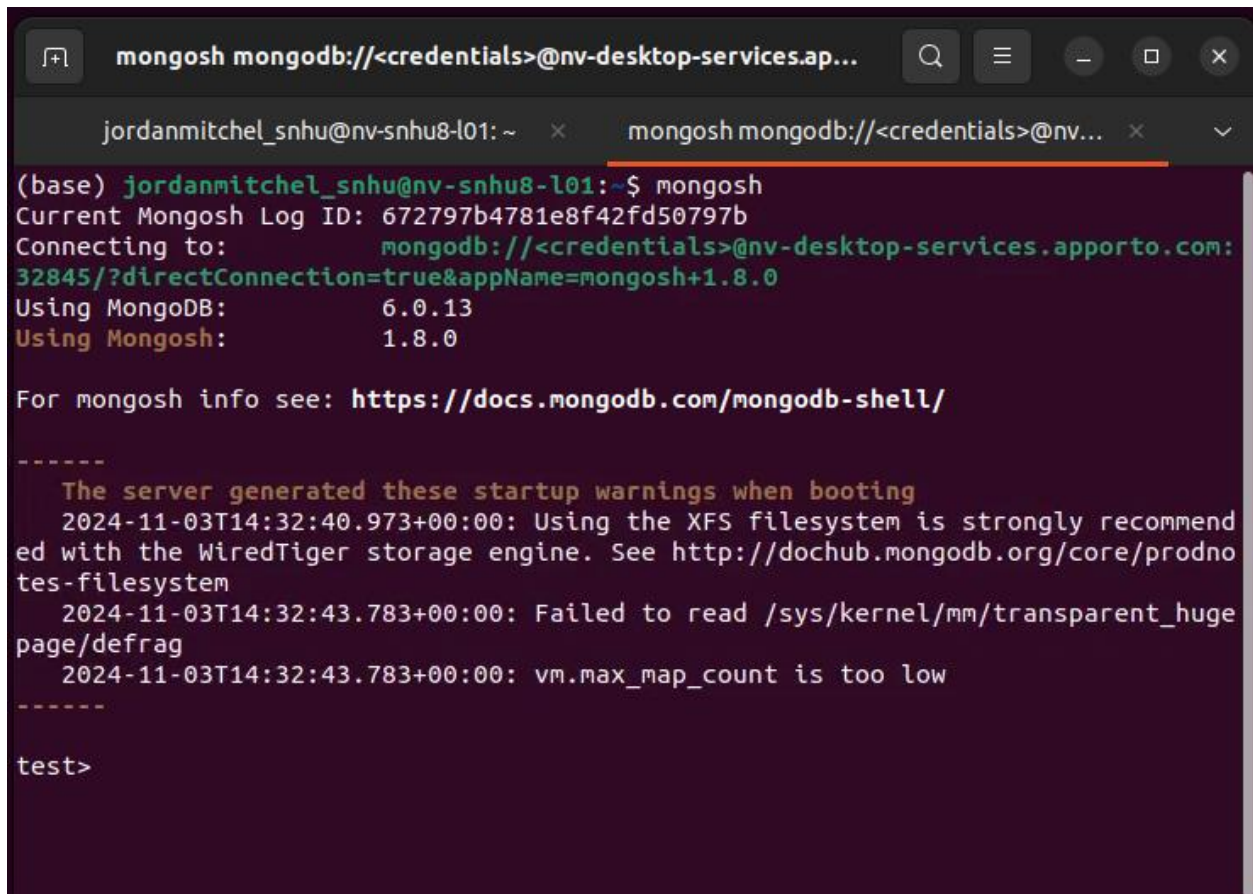
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Professor Morris

First, you must verify access to the environment by starting up MongoDB and the mongo shell. Open the terminal application, which will bring up the Linux shell prompt. Complete the following:

- Execute the mongo command to start the mongo shell. This will bring up the mongo shell prompt.
- Take a screenshot of the whole terminal window to verify your presence in the mongo shell. All of your screenshots must include your username, which is at the top of your terminal window.

A screenshot of a terminal window with a dark purple background. The window title bar shows 'mongosh mongodb://<credentials>@nv-desktop-services.ap...'. The terminal content shows the user 'jordanmitchel_snhu@nv-snhu8-l01' running the 'mongosh' command. It displays the current log ID, connection details to 'mongodb://<credentials>@nv-desktop-services.apporto.com:32845', and the versions of MongoDB (6.0.13) and Mongosh (1.8.0). It also includes a link for mongosh info and several startup warnings from the server. The prompt 'test>' is visible at the bottom.

```
(base) jordanmitchel_snhu@nv-snhu8-l01:~$ mongosh
Current Mongosh Log ID: 672797b4781e8f42fd50797b
Connecting to:      mongodb://<credentials>@nv-desktop-services.apporto.com:
32845/?directConnection=true&appName=Mongosh+1.8.0
Using MongoDB:      6.0.13
Using Mongosh:      1.8.0

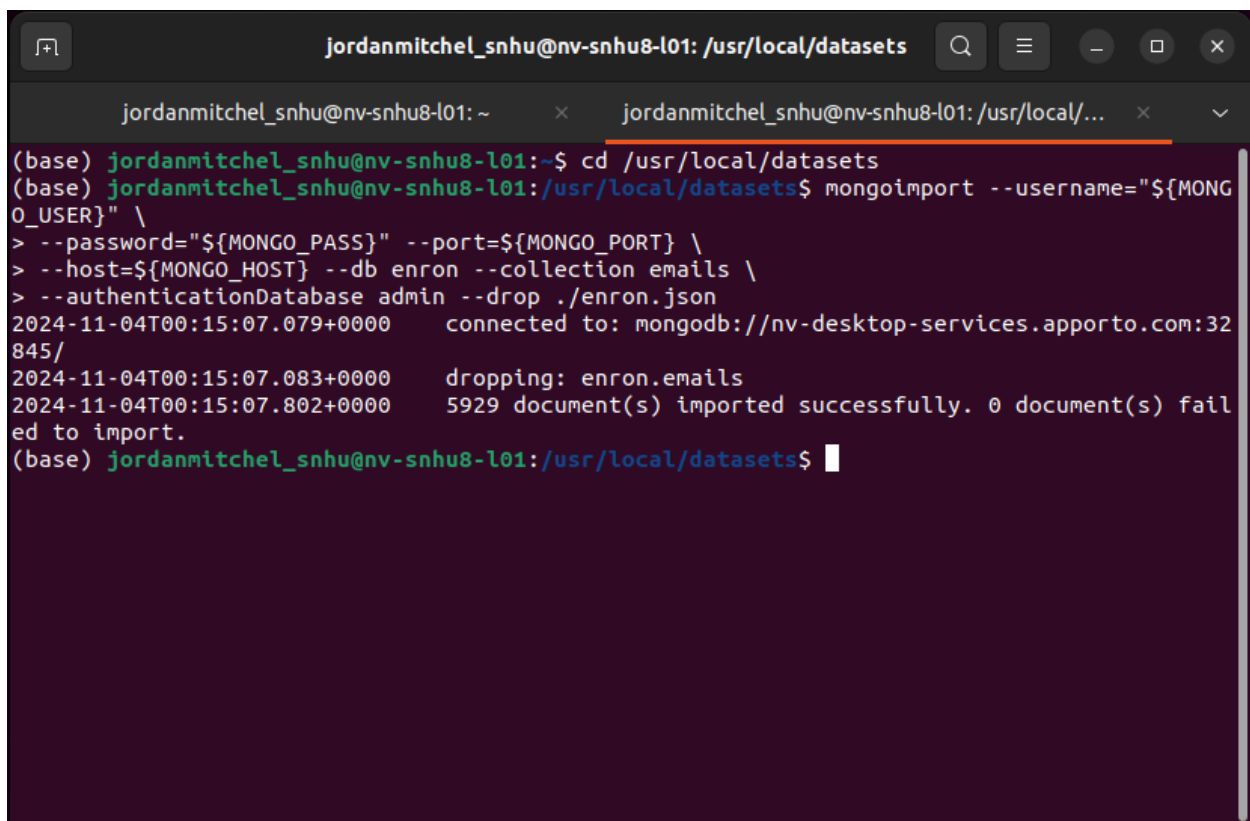
For mongosh info see: https://docs.mongodb.com/mongodb-shell/

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  The server generated these startup warnings when booting
  2024-11-03T14:32:40.973+00:00: Using the XFS filesystem is strongly recommend
ed with the WiredTiger storage engine. See http://dochub.mongodb.org/core/prodno
tes-filesystem
  2024-11-03T14:32:43.783+00:00: Failed to read /sys/kernel/mm/transparent_huge
page/defrag
  2024-11-03T14:32:43.783+00:00: vm.max_map_count is too low
-----

test>
```

You have been given a preloaded database containing email documents. Exit MongoDB and return to the Linux prompt. Using the database provided, execute the following administrative commands:

- **Load the database by executing the following at the Linux command line in the terminal you opened:**
- `cd /usr/local/datasets`
`mongoimport --username="${MONGO_USER}" \
--password="${MONGO_PASS}" --port=${MONGO_PORT} \
--host=${MONGO_HOST} --db enron --collection emails \
--authenticationDatabase admin --drop ./enron.json`



```
jordanmitchel_snhu@nv-snhu8-l01: /usr/local/datasets
jordanmitchel_snhu@nv-snhu8-l01: ~
jordanmitchel_snhu@nv-snhu8-l01: /usr/local/datasets$ cd /usr/local/datasets
(base) jordanmitchel_snhu@nv-snhu8-l01:~$ cd /usr/local/datasets
(base) jordanmitchel_snhu@nv-snhu8-l01:/usr/local/datasets$ mongoimport --username="${MONGO_USER}" \
> --password="${MONGO_PASS}" --port=${MONGO_PORT} \
> --host=${MONGO_HOST} --db enron --collection emails \
> --authenticationDatabase admin --drop ./enron.json
2024-11-04T00:15:07.079+0000    connected to: mongod://nv-desktop-services.apporto.com:32845/
2024-11-04T00:15:07.083+0000    dropping: enron.emails
2024-11-04T00:15:07.802+0000    5929 document(s) imported successfully. 0 document(s) failed to import.
(base) jordanmitchel_snhu@nv-snhu8-l01:/usr/local/datasets$
```

Retrieve a document from the collection by executing the following commands in the mongo shell. Take a screenshot to verify your execution of these commands. `show dbs`

`show dbs` #lists directory of databases

`use enron` #this sets db to the enron database

`show collections` #lists directory of collections

`db.emails.findOne()` #retrieves a document from the emails collection

```
mongosh mongodb://<credentials>@nv-desktop-services.apporto.com:32845/?directConnection=true
jordanmitchel_snhu@nv-snhu8-l01: ~
(base) jordanmitchel_snhu@nv-snhu8-l01: /usr/local/datasets$ mongosh
Current Mongosh Log ID: 672813bfc83047bd27f2dc9c
Connecting to:      mongodb://<credentials>@nv-desktop-services.apporto.com:32845/?directConnection=true&appName=mon
gosh+1.8.0
Using MongoDB:      6.0.13
Using Mongosh:      1.8.0

For mongosh info see: https://docs.mongodb.com/mongodsh-shell/

-----
The server generated these startup warnings when booting
2024-11-03T23:50:18.085+00:00: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. S
ee http://dochub.mongodb.org/core/prodnotes-filesystem
2024-11-03T23:50:20.097+00:00: Failed to read /sys/kernel/mm/transparent_hugepage/defrag
2024-11-03T23:50:20.097+00:00: vm.max_map_count is too low
-----

test> show dbs
admin    100.00 KiB
config  108.00 KiB
enron    7.36 MiB
local    72.00 KiB
test> use enron
switched to db enron
enron> show collections
emails
enron> db.emails.findOne()
{
  _id: ObjectId("52af48b5d55148fa0c199646"),
  sender: 'tori.wells@enron.com',
  recipients: [ 'michael@optsevents.com' ],
  cc: [],
  text: 'Mr. Christman:\n' +
        '\n' +
```

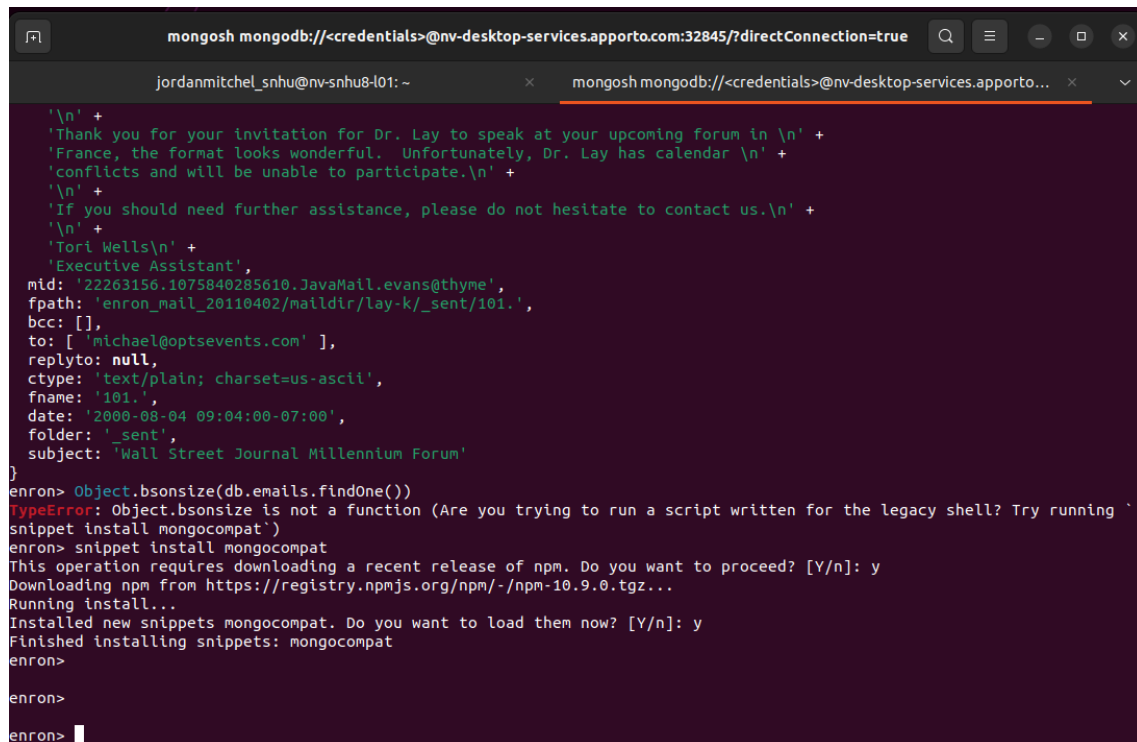
```
enron    7.36 MiB
local    72.00 KiB
test> use enron
switched to db enron
enron> show collections
emails
enron> db.emails.findOne()
{
  _id: ObjectId("52af48b5d55148fa0c199646"),
  sender: 'tori.wells@enron.com',
  recipients: [ 'michael@optsevents.com' ],
  cc: [],
  text: 'Mr. Christman:\n' +
        '\n' +
        'Thank you for your invitation for Dr. Lay to speak at your upcoming forum in \n' +
        'France, the format looks wonderful. Unfortunately, Dr. Lay has calendar \n' +
        'conflicts and will be unable to participate.\n' +
        '\n' +
        'If you should need further assistance, please do not hesitate to contact us.\n' +
        '\n' +
        'Tori Wells\n' +
        'Executive Assistant',
  mid: '22263156.1075840285610.JavaMail.evans@thyme',
  fpath: 'enron_mail_20110402/maildir/lay-k/_sent/101.',
  bcc: [],
  to: [ 'michael@optsevents.com' ],
  replyto: null,
  ctype: 'text/plain; charset=us-ascii',
  fname: '101.',
  date: '2000-08-04 09:04:00-07:00',
  folder: '_sent',
  subject: 'Wall Street Journal Millennium Forum'
}
enron>
```

Execute the command to find the size of a single document of your choosing from the enron

database. Refer to [Two Ways to Get a Document's Size in MongoDB](#) or the textbook if you need help constructing this command. Take a screenshot to verify your execution of this command.

Note: For this command to work, you may need to activate compatibility with legacy versions of the mongo shell. You accomplish this by entering the following at the shell prompt:

snippet install mongocompat



```
mongosh mongodb://<credentials>@nv-desktop-services.apporto.com:32845/?directConnection=true
jordanmitchel_snhu@nv-snhu8-l01: ~
'\\n' +
'Thank you for your invitation for Dr. Lay to speak at your upcoming forum in \\n' +
'France, the format looks wonderful. Unfortunately, Dr. Lay has calendar \\n' +
'conflicts and will be unable to participate.\\n' +
'\\n' +
'If you should need further assistance, please do not hesitate to contact us.\\n' +
'\\n' +
'Tori Wells\\n' +
'Executive Assistant',
mid: '22263156.1075840285610.JavaMail.evans@thyme',
fpath: 'enron_mail_20110402/maildir/lay-k/_sent/101.',
bcc: [],
to: [ 'michael@optsevents.com' ],
replyto: null,
ctype: 'text/plain; charset=us-ascii',
fname: '101.',
date: '2000-08-04 09:04:00-07:00',
folder: 'sent',
subject: 'Wall Street Journal Millennium Forum'
}
enron> Object.bsonsize(db.emails.findOne())
TypeError: Object.bsonsize is not a function (Are you trying to run a script written for the legacy shell? Try running `
snippet install mongocompat`)
enron> snippet install mongocompat
This operation requires downloading a recent release of npm. Do you want to proceed? [Y/n]: y
Downloading npm from https://registry.npmjs.org/npm/-/npm-10.9.0.tgz...
Running install...
Installed new snippets mongocompat. Do you want to load them now? [Y/n]: y
Finished installing snippets: mongocompat
enron>
enron>
enron> 
```

```
mongosh mongodb://<credentials>@nv-desktop-services.apporto.com:32845/?directConnection=true
mongosh mongodb://<credentials>@nv-desktop-services.apporto... x jordanmitchel_snhu@nv-snhu8-l01: ~
enron> show collections
emails
enron> db.emails.findOne()
{
  _id: ObjectId("52af48b5d55148fa0c199646"),
  sender: 'tori.wells@enron.com',
  recipients: [ 'michael@optsevents.com' ],
  cc: [],
  text: 'Mr. Christman:\n' +
    '\n' +
    'Thank you for your invitation for Dr. Lay to speak at your upcoming forum in \n' +
    'France, the format looks wonderful. Unfortunately, Dr. Lay has calendar \n' +
    'conflicts and will be unable to participate.\n' +
    '\n' +
    'If you should need further assistance, please do not hesitate to contact us.\n' +
    '\n' +
    'Tori Wells\n' +
    'Executive Assistant',
  mid: '22263156.1075840285610.JavaMail.evans@thyme',
  fpath: 'enron_mail_20110402/maildir/lay-k/_sent/101.',
  bcc: [],
  to: [ 'michael@optsevents.com' ],
  replyto: null,
  ctype: 'text/plain; charset=us-ascii',
  fname: '101.',
  date: '2000-08-04 09:04:00-07:00',
  folder: '_sent',
  subject: 'Wall Street Journal Millennium Forum'
}
enron> Object.bsonsize(db.emails.findOne())
771
```

Execute the command to find the size of the collection of documents in the enron database. Refer back to the [Two Ways to Get a Document's Size in MongoDB](#) article if you need help constructing this command. Take a screenshot to verify your execution of this command.

```
mongosh mongodb://<credentials>@nv-desktop-services.apporto.com:32845/?directConnection=true
mongosh mongodb://<credentials>@nv-desktop-services.apporto... x jordanmitchel_snhu@nv-snhu8-l01: ~
enron> show collections
emails
enron> db.emails.findOne()
{
  _id: ObjectId("52af48b5d55148fa0c199646"),
  sender: 'tori.wells@enron.com',
  recipients: [ 'michael@optsevents.com' ],
  cc: [],
  text: 'Mr. Christman:\n' +
    '\n' +
    'Thank you for your invitation for Dr. Lay to speak at your upcoming forum in \n' +
    'France, the format looks wonderful. Unfortunately, Dr. Lay has calendar \n' +
    'conflicts and will be unable to participate.\n' +
    '\n' +
    'If you should need further assistance, please do not hesitate to contact us.\n' +
    '\n' +
    'Tori Wells\n' +
    'Executive Assistant',
  mid: '22263156.1075840285610.JavaMail.evans@thyme',
  fpath: 'enron_mail_20110402/maildir/lay-k/_sent/101.',
  bcc: [],
  to: [ 'michael@optsevents.com' ],
  replyto: null,
  ctype: 'text/plain; charset=us-ascii',
  fname: '101.',
  date: '2000-08-04 09:04:00-07:00',
  folder: '_sent',
  subject: 'Wall Street Journal Millennium Forum'
}
enron> Object.bsonsize(db.emails.findOne())
771
enron> db.emails.stats().size
15583945
enron>
```