|  |  |  |
| --- | --- | --- |
| ***Instructions:*** *Fill in the description for each item in the* Commands *column by explaining what the command does.  In the cases where there is an existing question in the* Description *column, answer the question as well as describe what the command does.*  *In the URL to* Mongo Documentation *column provide a link to the command’s section in the MongoDB documentation. Finally replace the headings in the* Commands *column with appropriate headings for each section.  The* Section headings *should describe what the whole section is about, while the* sub headings *should be labeled as either* **methods, options, operators** *or***helper methods.** | | |
| **Commands** | **Description** | **URL to Mongo Documentation** |
| Starting Mongo Commands | | |
| mongod | [mongod](https://docs.mongodb.com/manual/reference/program/mongod/index.html#bin.mongod) is the primary daemon process for the MongoDB system. It handles data requests, manages data access, and performs background management operations. | <https://docs.mongodb.com/manual/reference/program/mongod/> |
| --dbpath C:\mongodb\data\db | The directory where the **mongod** instance stores its data. | <https://docs.mongodb.com/manual/reference/program/mongod/index.html#cmdoption-mongod-dbpath> |
| --logpath 'C':\mongodb\log\mongo.log | Sends all diagnostic logging information to a log file instead of to standard output or to the host’s [syslog](https://docs.mongodb.com/manual/reference/glossary/#term-syslog) system. MongoDB creates the log file at the path you specify. | <https://docs.mongodb.com/manual/reference/program/mongod/index.html#cmdoption-mongod-logpath> |
| --logappend | Appends new entries to the end of the existing log file when the **mongod** instance restarts. Without this option, [mongod](https://docs.mongodb.com/manual/reference/program/mongod/index.html" \l "bin.mongod" \o "bin.mongod) will back up the existing log and create a new file. | <https://docs.mongodb.com/manual/reference/program/mongod/index.html#cmdoption-mongod-logappend> |
| ­­\_\_rest | **mongod** expands \_\_rest expansion directives when parsing the configuration file. | <https://docs.mongodb.com/manual/reference/program/mongod/index.html#cmdoption-mongod-configexpand> |
| --install | Installs **mongod.exe** as a Windows Service and exits. | <https://docs.mongodb.com/manual/reference/program/mongod.exe/index.html#cmdoption-mongod-exe-install> |
| net start MongoDB | Start the MongoDB service | <https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows-unattended/index.html#start-the-mongodb-service> |
|  |  |  |
| Mongo Shell Commands | | |
| mongo | You can run [mongo](https://docs.mongodb.com/manual/reference/program/mongo/#bin.mongo) shell without any command-line options to connect to a [MongoDB](https://docs.mongodb.com/manual/reference/program/mongod/) instance running on your **localhost** with **default port** 27017 | <https://docs.mongodb.com/manual/mongo/#local-mongodb-instance-on-default-port> |
| show dbs | To list the databases available to the user, use the helper show dbs | <https://docs.mongodb.com/manual/mongo/#working-with-the-mongo-shell> |
| show collections | Print a list of all collections for current database | <https://docs.mongodb.com/manual/reference/mongo-shell/#command-helpers> |
| db | To display the database you are using, type db | <https://docs.mongodb.com/manual/mongo/#working-with-the-mongo-shell> |
|  |  |  |
| Section heading | | |
| db.createCollection('collectionName') | Creates a new collection or a view. Commonly used to create a capped collection | <https://docs.mongodb.com/manual/reference/method/db.createCollection/#db.createCollection> |
| use collectionName | To select a database to use, in the [mongo](https://docs.mongodb.com/manual/reference/program/mongo/#bin.mongo) shell, issue the use <db> statement | <https://docs.mongodb.com/manual/core/databases-and-collections/#databases> |
|  |  |  |
| Section heading | | |
| db.collectionName.insert({key:"value",key:"value"},{key:"value", key:"value"}); | Creates a new document in a collection | <https://docs.mongodb.com/manual/reference/method/db.collection.insert/#db.collection.insert> |
|  |  |  |
| Section heading | | |
| db.collectionName.find(); | Performs a query on a collection or a view and returns a cursor object | <https://docs.mongodb.com/manual/reference/method/db.collection.find/#db.collection.find> |
| db.collectionName.find({key:value}); | Performs a query on a collection or a view and returns a cursor object | <https://docs.mongodb.com/manual/reference/method/db.collection.find/#db.collection.find> |
| **Searching for an object property** example: db.collectionName.find({"object.key":value); | *Why does the" key" have quotes?*  It is equal to a string, so it must be a string | <https://docs.mongodb.com/manual/reference/method/db.collection.find/#type-bracketing> |
|  |  |  |
| sub Heading | | |
| **.sort({key:value})** example: db.collectionName.find().sort({key:value}); | Returns results ordered according to a sort specification | <https://docs.mongodb.com/manual/reference/method/cursor.sort/#cursor.sort> |
| **.count()** example: db.collectionName.find({key:value}).count(); | Wraps [count](https://docs.mongodb.com/manual/reference/command/count/#dbcmd.count) to return a count of the number of documents in a collection or a view | <https://docs.mongodb.com/manual/reference/method/db.collection.count/#db.collection.count> |
| **.limit(num)** example: db.collectionName.find({key:value}).limit(4); | Constrains the size of a cursor’s result set | <https://docs.mongodb.com/manual/reference/method/cursor.limit/#cursor.limit> |
| **.forEach(function(var){})** example: db.collectionName.find().forEach((doc)=>{print("words: " + doc.key)}) | Applies a JavaScript function for every document in a cursor | <https://docs.mongodb.com/manual/reference/method/cursor.forEach/#cursor.forEach> |
| **.pretty()** example: db.collectionName.find().pretty(); | Configures the cursor to display results in an easy-to-read format | <https://docs.mongodb.com/manual/reference/method/cursor.pretty/#cursor.pretty> |
|  |  |  |
| sub heading | | |
| **{$or:[{key:value}, {key:value}]}** example: db.collectionName.find({$or:[{key:value}, {key:value}]}); | The [$or](https://docs.mongodb.com/manual/reference/operator/query/or/index.html#op._S_or) operator performs a logical OR operation on an array of two or more <expressions> and selects the documents that satisfy at least one of the <expressions> | <https://docs.mongodb.com/manual/reference/operator/query/or/index.html> |
| **{key:{$lt:value}}** example: db.collectionName.find({key:{$lt:value}}); | [$lt](https://docs.mongodb.com/manual/reference/operator/query/lt/index.html#op._S_lt) selects the documents where the value of the field is less than (i.e. <) the specified value | <https://docs.mongodb.com/manual/reference/operator/query/lt/index.html> |
| **{key:{$lte:value}}** example: db.collectionName.find({key:{$lte:value}}); | [$lte](https://docs.mongodb.com/manual/reference/operator/query/lte/index.html#op._S_lte) selects the documents where the value of the field is less than or equal to (i.e. <=) the specified value | <https://docs.mongodb.com/manual/reference/operator/query/lte/index.html> |
| **{key:{$gt:value}}** example: db.collectionName.find({key:{$gt:value}}); | [$gt](https://docs.mongodb.com/manual/reference/operator/query/gt/index.html#op._S_gt) selects those documents where the value of the field is greater than (i.e. >) the specified value | <https://docs.mongodb.com/manual/reference/operator/query/gt/index.html> |
| **{key:{$gte:value}}** example: db.collectionName.find({key:{$gte:value}}); | [$gte](https://docs.mongodb.com/manual/reference/operator/query/gte/index.html#op._S_gte) selects the documents where the value of the field is greater than or equal to (i.e. >=) a specified value (e.g. value.) | <https://docs.mongodb.com/manual/reference/operator/query/gte/index.html> |
|  |  |  |
| Section heading | | |
| db.collectionName.update({key:"value"},{key:"value", key"value", newKey:"value"}); | Modifies a document in a collection | <https://docs.mongodb.com/manual/reference/method/db.collection.update/#db.collection.update> |
|  |  |  |
| sub heading | | |
| **$set:{key:"value"}**  example:db.collectionName.update({key:"value"}, {$set:{key:"value"}}); | The [$set](https://docs.mongodb.com/manual/reference/operator/update/set/index.html#up._S_set) operator replaces the value of a field with the specified value | <https://docs.mongodb.com/manual/reference/operator/update/set/index.html> |
| **$unset:{unset:"value"}**  example:db.collectionName.update({key:"value"}, {$unset:{key:"value"}}); | The [$unset](https://docs.mongodb.com/manual/reference/operator/update/unset/index.html#up._S_unset) operator deletes a particular field | <https://docs.mongodb.com/manual/reference/operator/update/unset/index.html> |
| **$inc:{key:"value"}**  example:db.collectionName.update({key:"value"}, {$inc:{key:"value"}}); | The [$inc](https://docs.mongodb.com/manual/reference/operator/update/inc/index.html#up._S_inc) operator increments a field by a specified value | <https://docs.mongodb.com/manual/reference/operator/update/inc/index.html> |
| **$rename:{key:"value"}**  example:db.collectionName.update({key:"value"}, {$rename:{"key":"value"}}); | *Why does the" key" have quotes in the second argument?*  It is the name of the old field that is being renamed | <https://docs.mongodb.com/manual/reference/operator/update/rename/index.html#definition> |
|  |  |  |
| sub heading | | |
| **{upsert:true}** example: db.collectionName.update({key:"value"}, {key:"value", key"value", newKey:"value"}, {upsert:true}); | Modifies an existing document or documents in a collection. The method can modify specific fields of an existing document or documents or replace an existing document entirely, depending on the [update parameter](https://docs.mongodb.com/manual/reference/method/db.collection.update/#update-parameter) | <https://docs.mongodb.com/manual/reference/method/db.collection.update/> |
|  |  |  |
| Section heading | | |
| db.cutomers.remove({key:"value"}) | *What would this remove?*  It removes documents based on the value of a key | <https://docs.mongodb.com/manual/reference/method/db.collection.remove/index.html> |
|  |  |  |
| sub heading | | |
| **{justOne: true}** example: db.cutomers.remove({key:"value"}, {justOne:true}) | To limit the deletion to just one document, set to true | <https://docs.mongodb.com/manual/reference/method/db.collection.remove/index.html> |