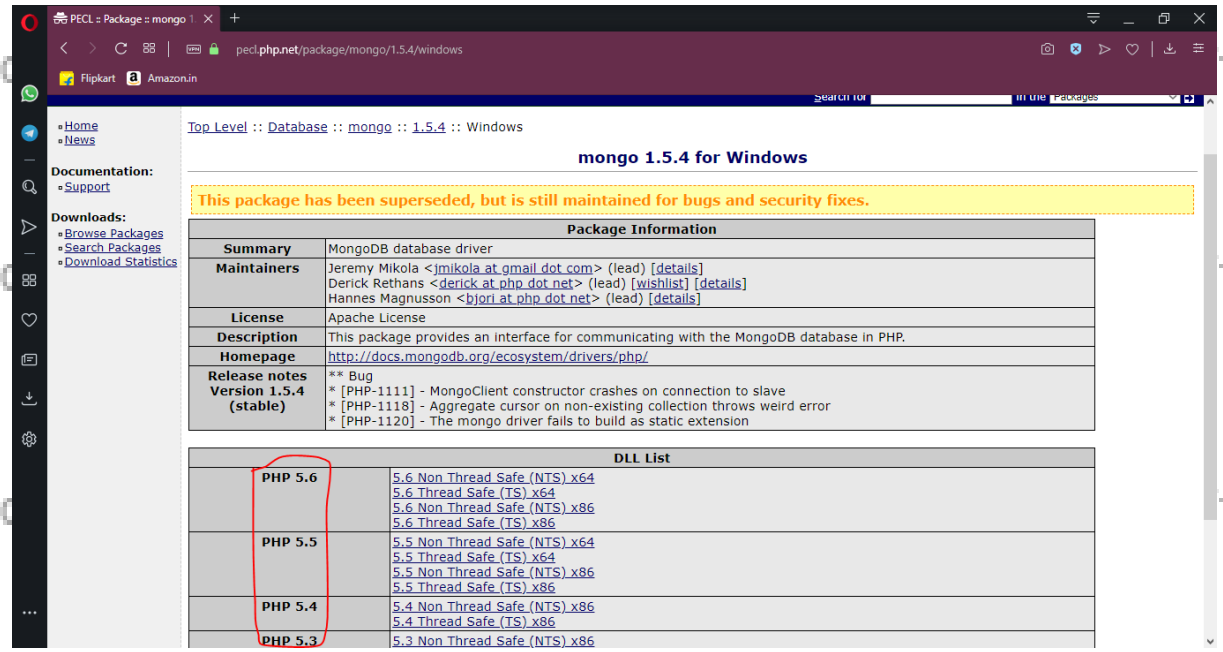
Connecting PHP with MongoDB and inserting, retrieving, updating and deleting

PHP mongo Driver Setup

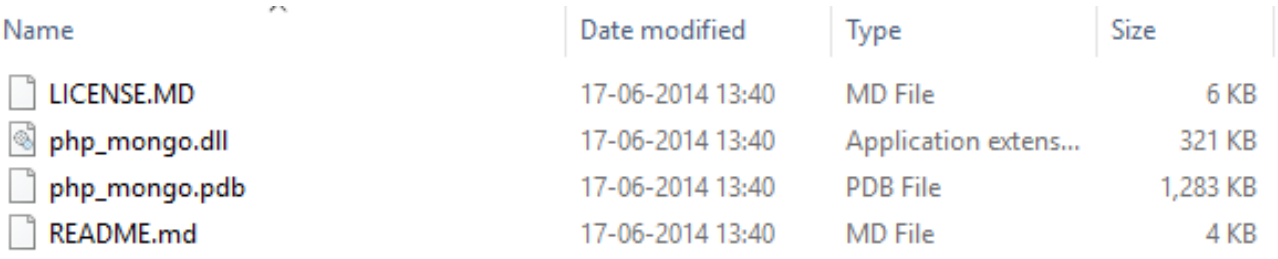
First download the driver from link button below.

PHP mongo link



Download the proper version.

We will get following files.



Now copy "php_mongo.dll" and paste it in "C:\xampp\php\ext" path.

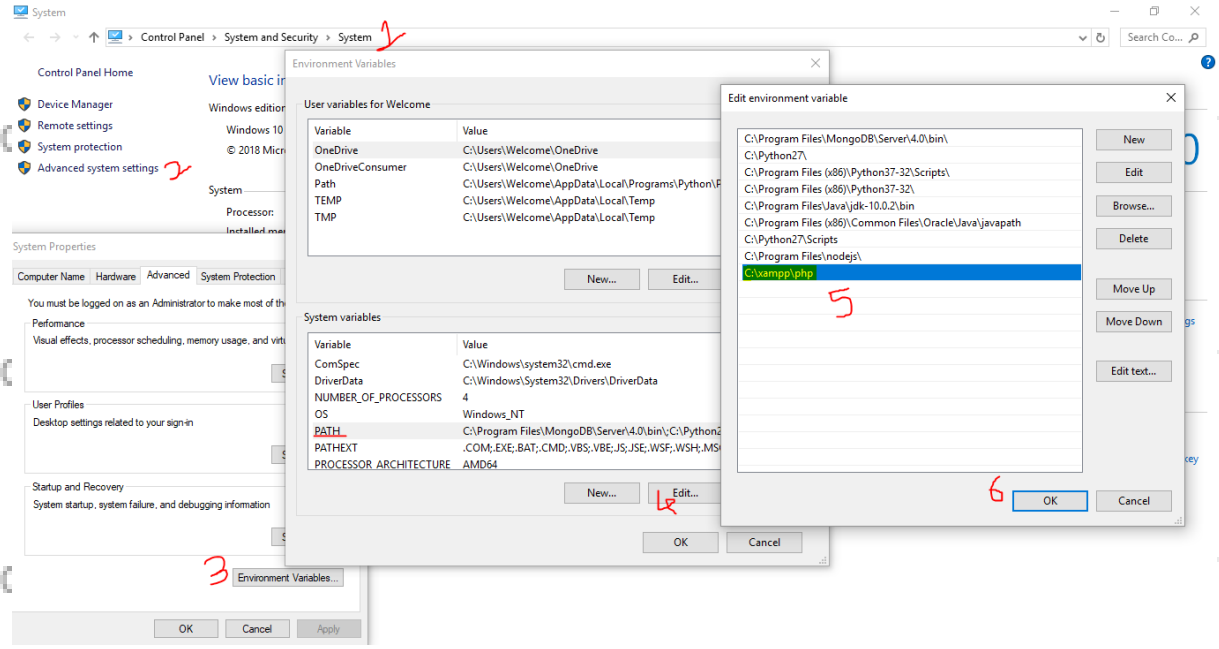
Now open "php.ini" which is in "C:\xampp\php".

Add "extension=php_mongo.dll" line in "php.ini".

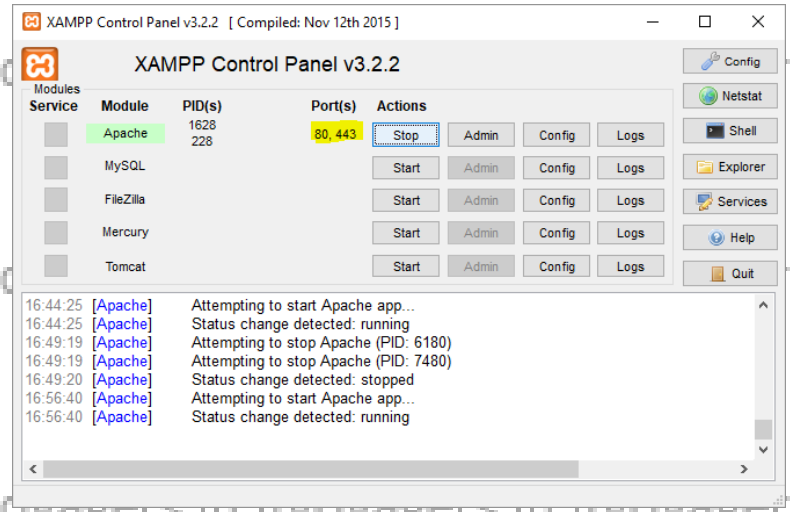
```
; See http://www.php.net/manual/en/snmp.installation.php
;extension=php_snmp.dll

;extension=php_soap.dll
;extension=php_sockets.dll
;extension=php_sqlite3.dll
;extension=php_sybase_ct.dll
;extension=php_tidy.dll
;extension=php_xmlrpc.dll
;extension=php_xsl.dll
extension=php_mongo.dll
;;;;;;;;;;;;;;;;;;;
; Module Settings ;
;;;;;;;;;;;;;;;;;;;
asp_tags=Off
display_startup_errors=On
track_errors=Off
y2k_compliance=On
```

Save the file.

Add "C:\xampp\php" in path of environment variable.

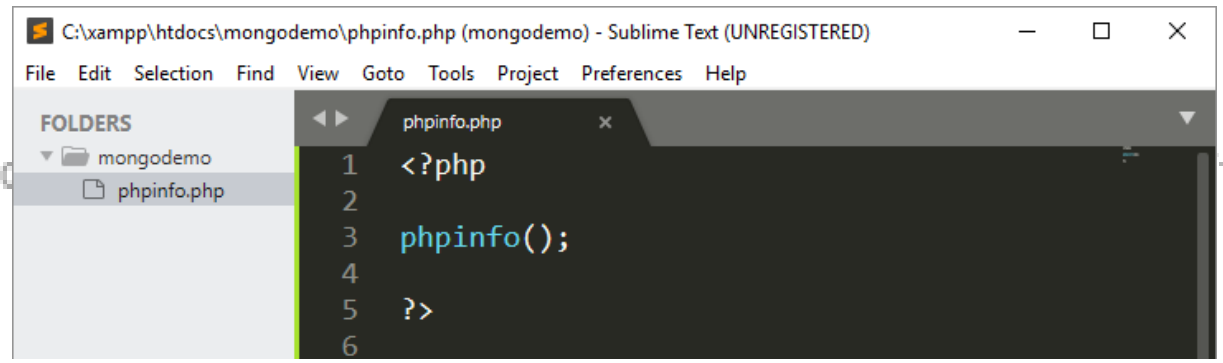


Now start XAMPP server.

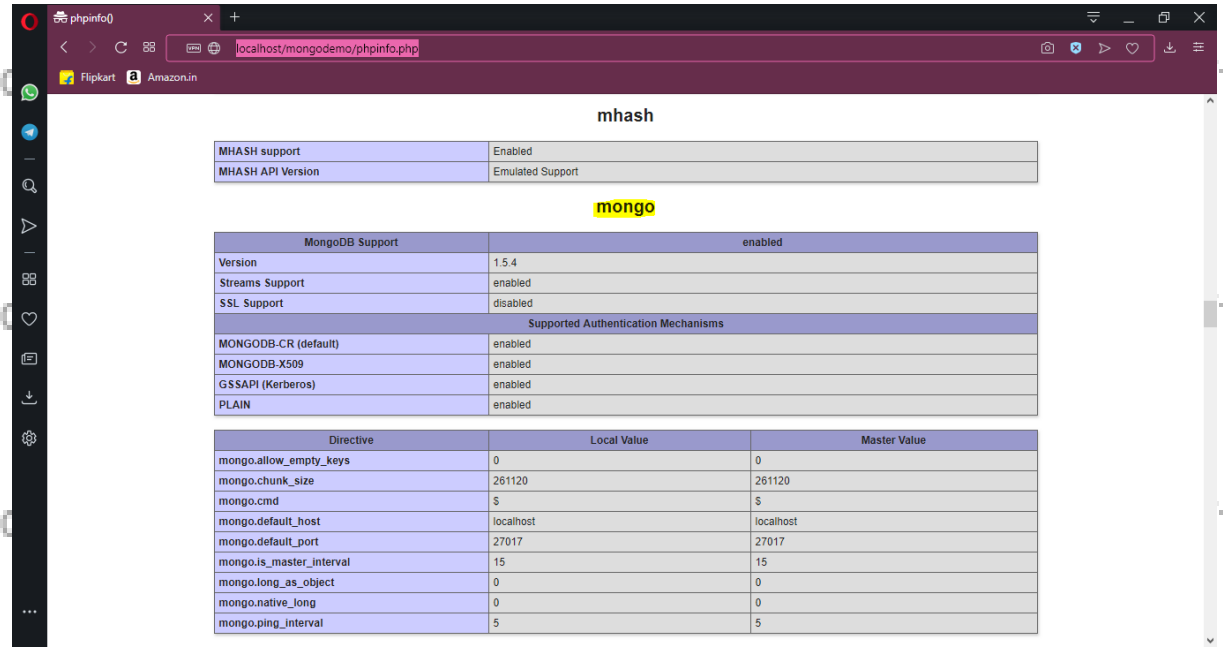


Now let's check that PHP mongo driver has been setup properly. First let's create "mongodemo" folder in "C:\xampp\htdocs\". Create "phpinfo.php" file in "C:\xampp\htdocs\ mongodemo".

And write the following code in it.



Once it is done open browser and navigate to "http://localhost/mongodemo/phpinfo.php".



This column is visible means we have install PHP mongo driver successfully.

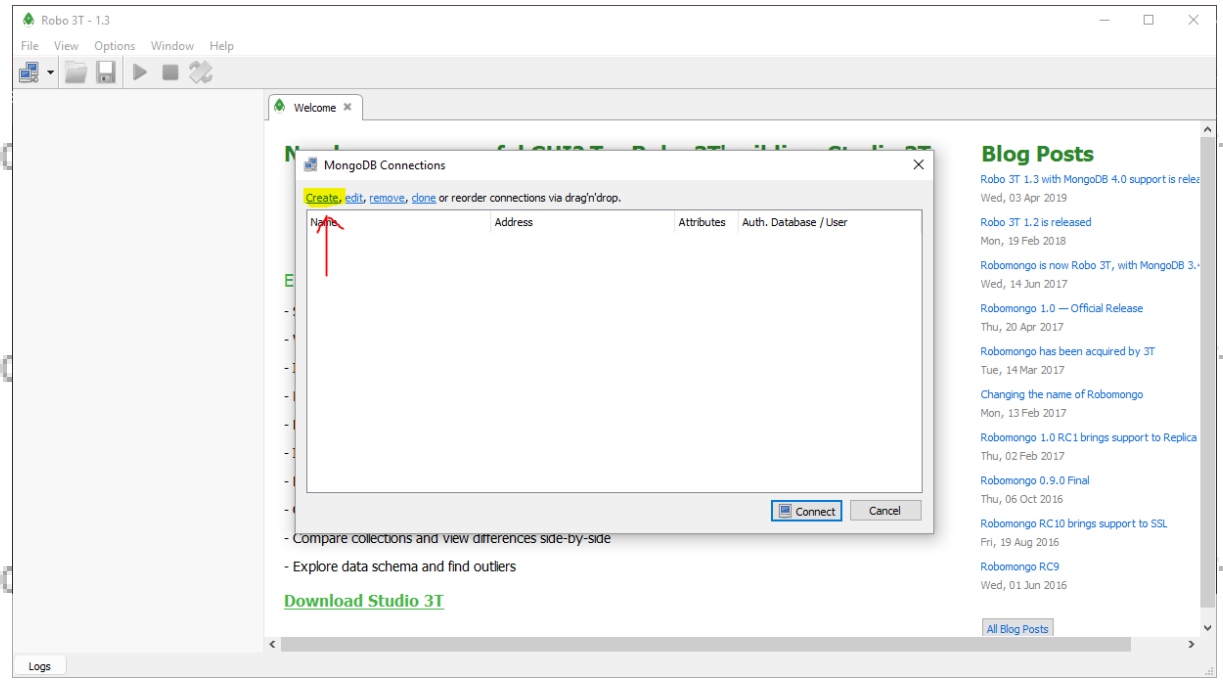
Database creation.

We are going to create simple database for students in mongoDB.

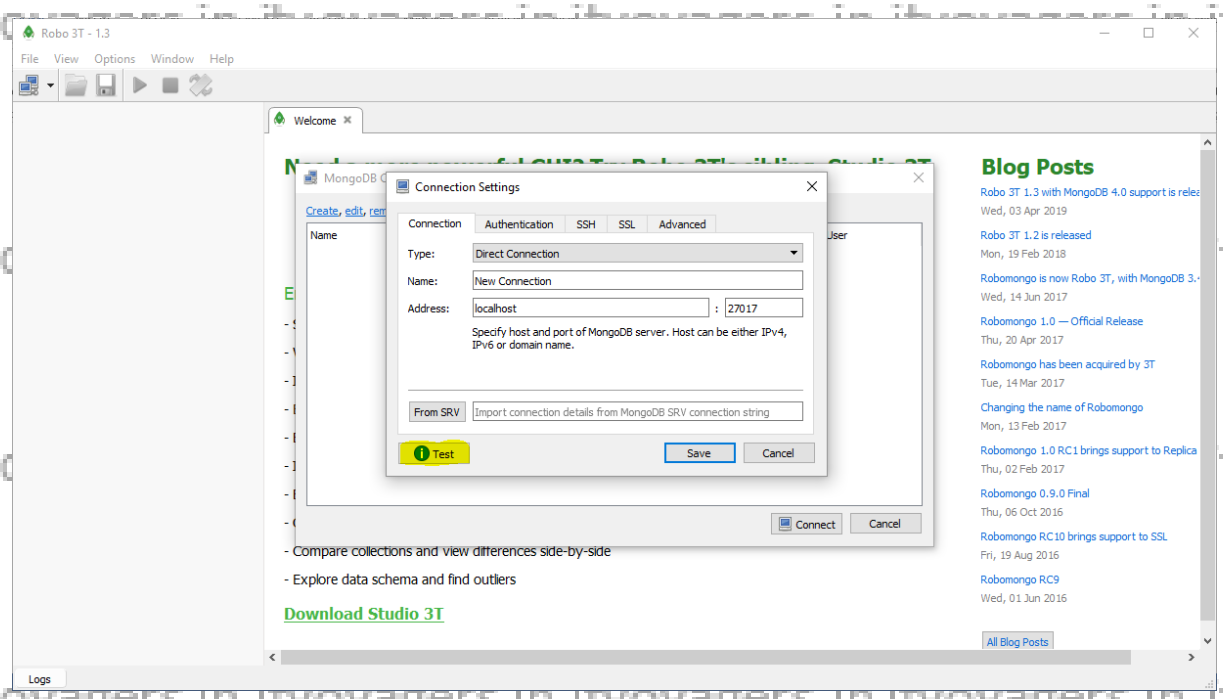
We are going to use GUI tool to connect with mongoDB, to download it click on below downloading link button.

https://robomongo.org/download

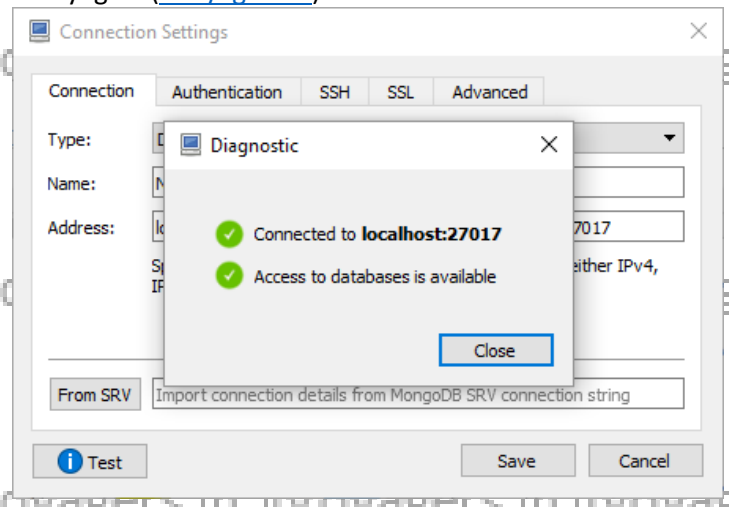
Install and Open "Robo 3T", you will see the following screen, then click on "create".



We can text connection by clicking on "Test".

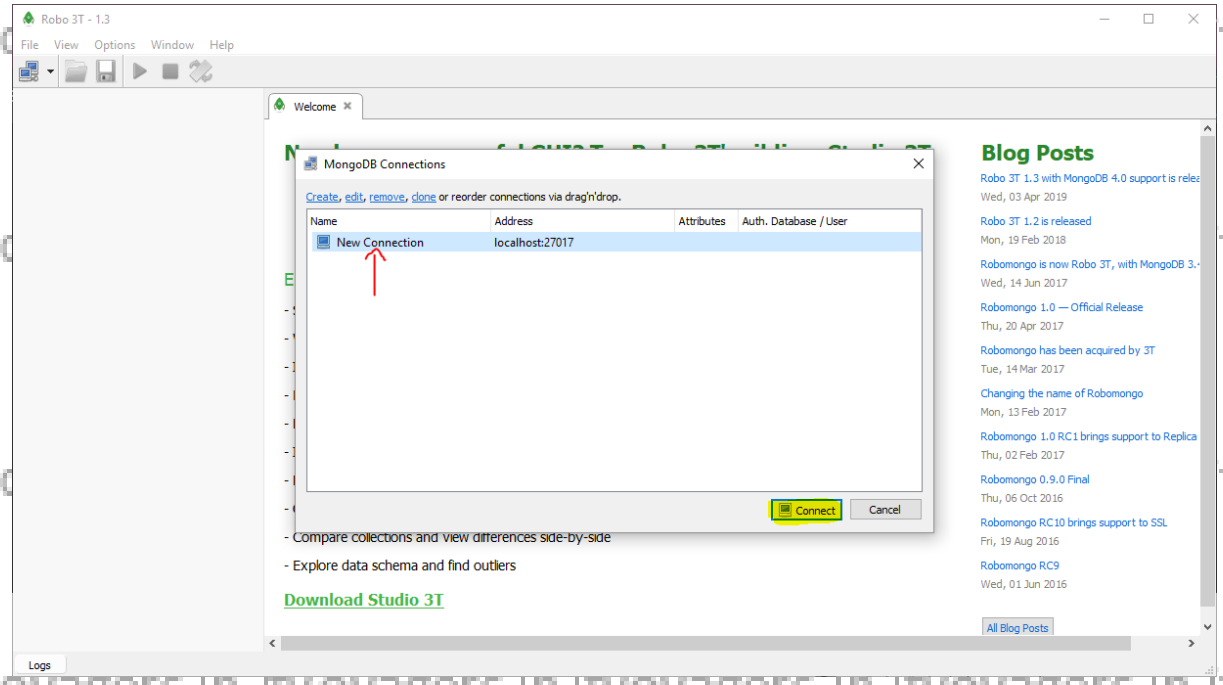


You will see following window which says that there is no problem in connection.



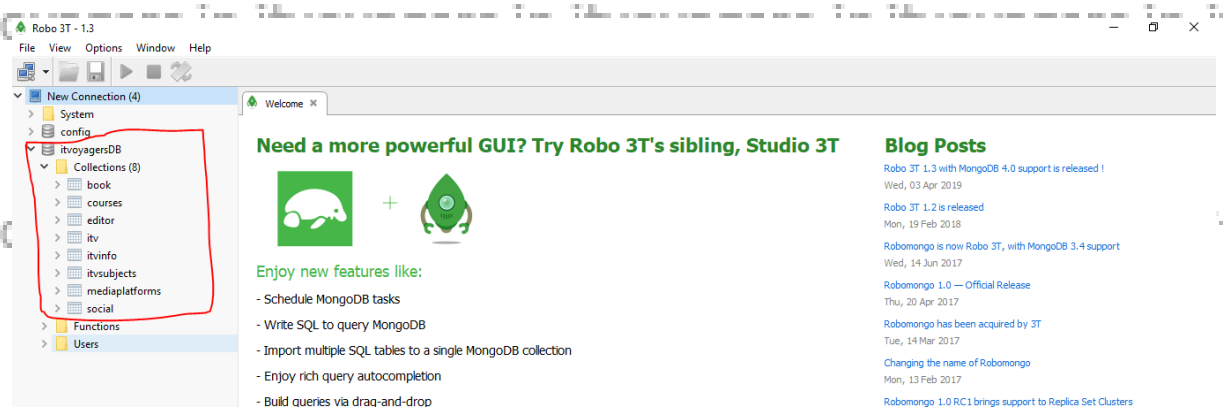
Click on “Close” and the “Save”.

We can see this connection in window.

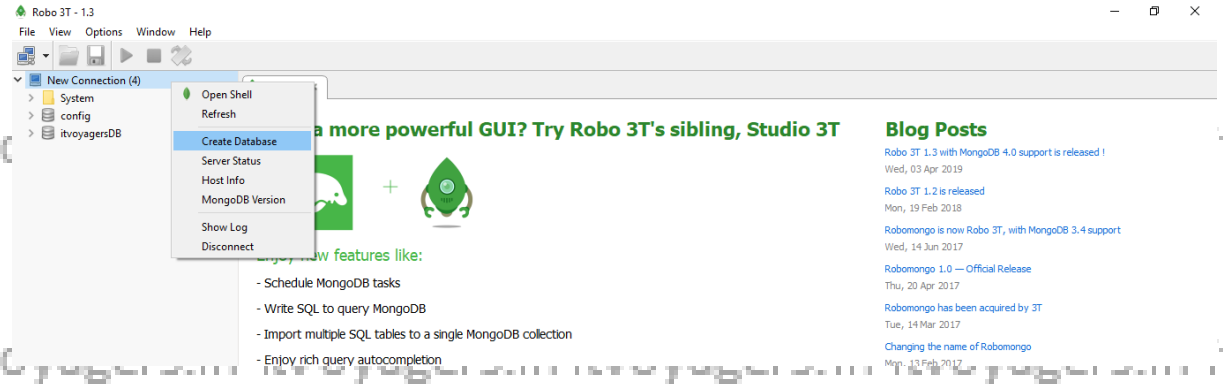


Now click on “Connect”.

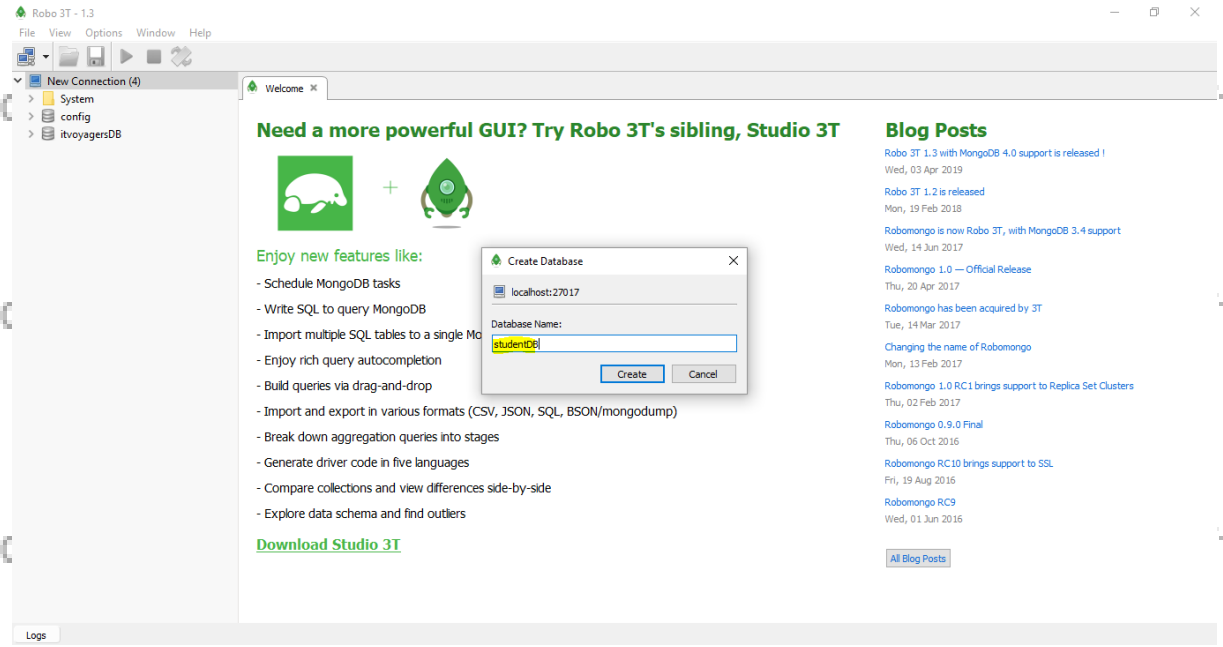
We can see that our previous databases and collections here.



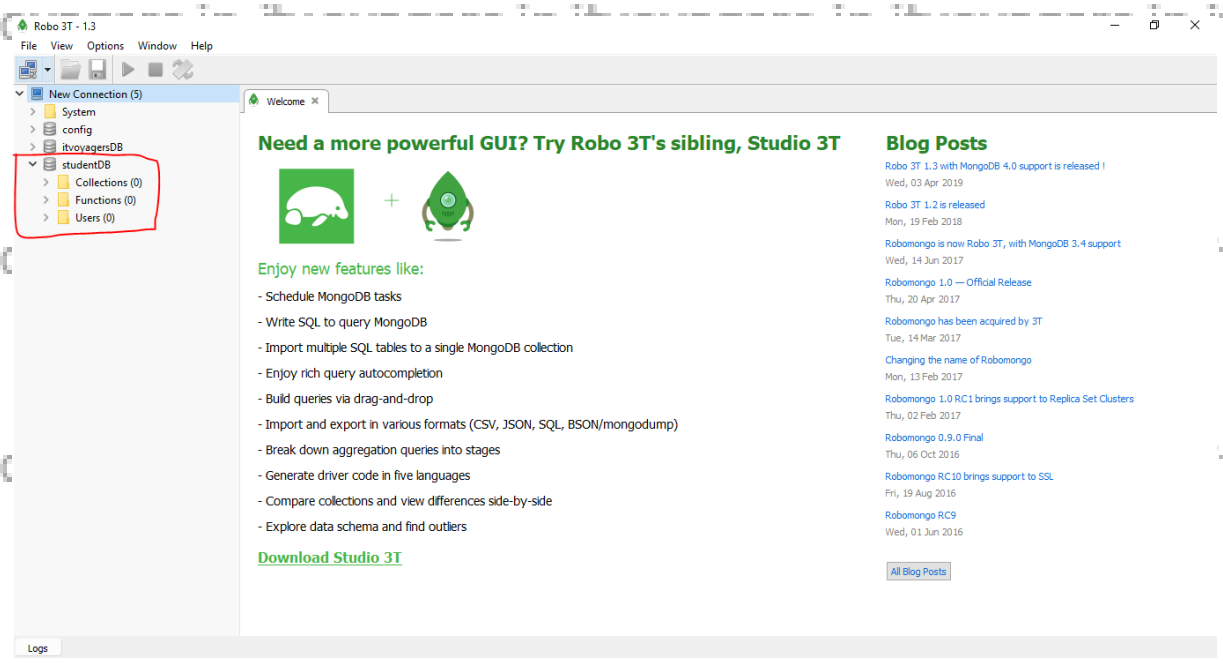
To create database using “Robo 3T” right-click on “New Connection”.



Enter database name and click on “Create”.

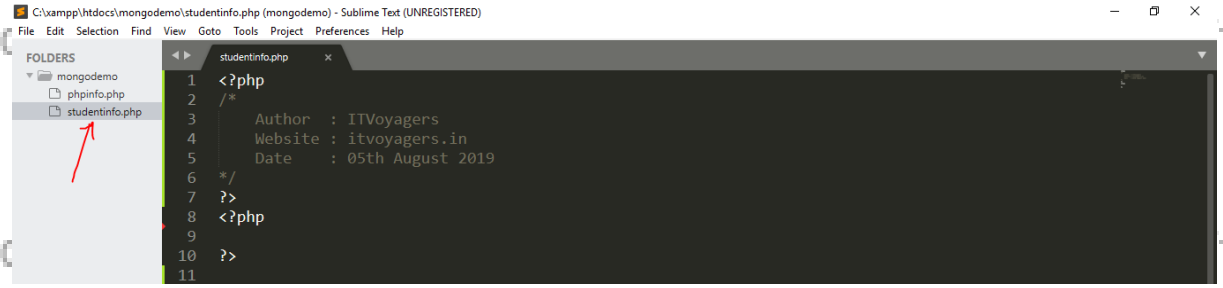


Here is our database.



Connection

Now open text editor (we are using Sublime Text) and create new php file named "studentinfo.php" in "C:\xampp\htdocs\mongodemo\".

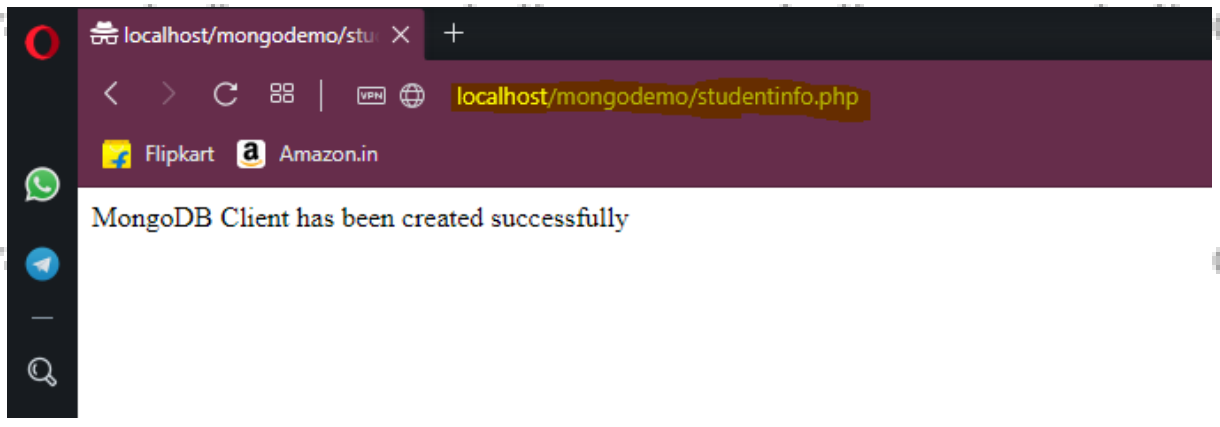


Following are the step-by-step process for CURD operation.

1. Create MongoClient() connect to mongoDB

```php
<?php
/*
    Author   : ITVoyagers
    Website : itvoyagers.in
    Date     : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();

// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";

?>
```

Now run this file in browser (http://localhost/mongodemo/studentinfo.php).

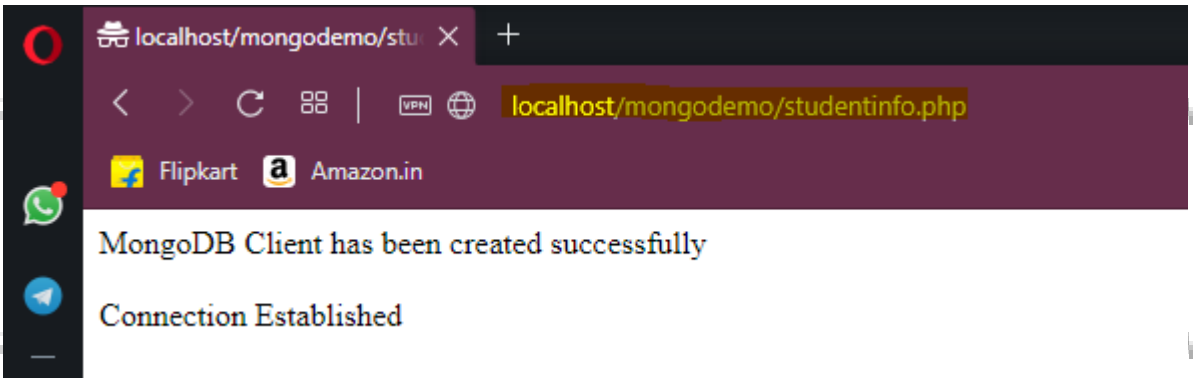


2. Select database (studentDB)

studentinfo.php

```php
<?php
/*
    Author  : ITVoyagers
    Website : itvoyagers.in
    Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB

    echo "<br><br>Connection Established";

?>
```

Now run this file in browser(http://localhost/mongodemo/studentinfo.php).

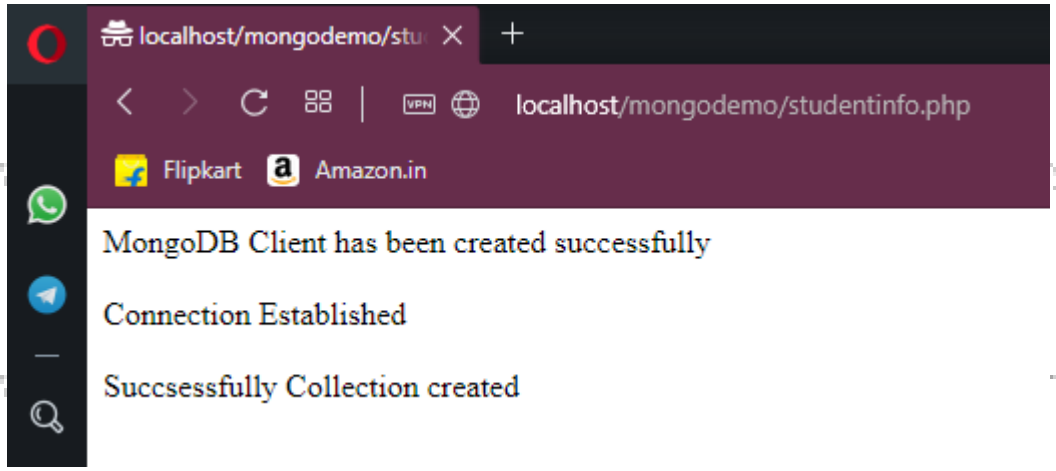


3. Create Collection

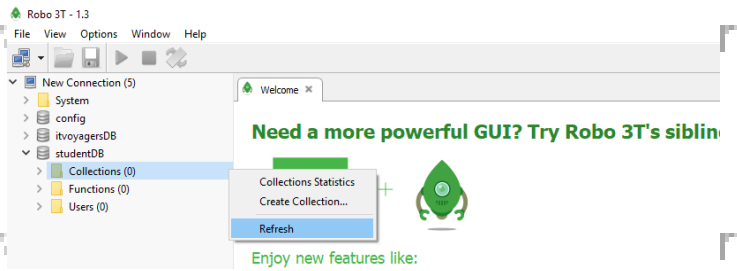
studentinfo.php

```php
<?php
/*
    Author  : ITVoyagers
    Website : itvoyagers.in
    Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB
    echo "<br><br>Connection Established";
// $stud_collection is reference and "student_info" is collection name
// createCollection() is method to create collection
    $stud_collection = $stud_db -> createCollection("student_info");
    echo "<br><br>Succsessfully Collection created";

```

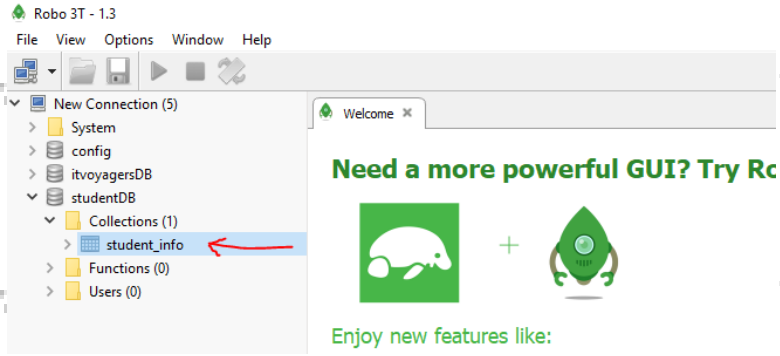
Now run this file in browser(http://localhost/mongodemo/studentinfo.php).



We can also check collection in "Robo 3T".



Just refresh the collections, and after that we can see the collection we created.



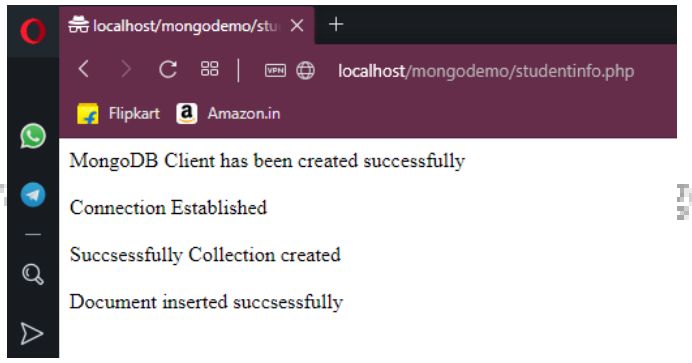
4. Insert

Note: In PHP array() represents "{ }" from mongoDB.

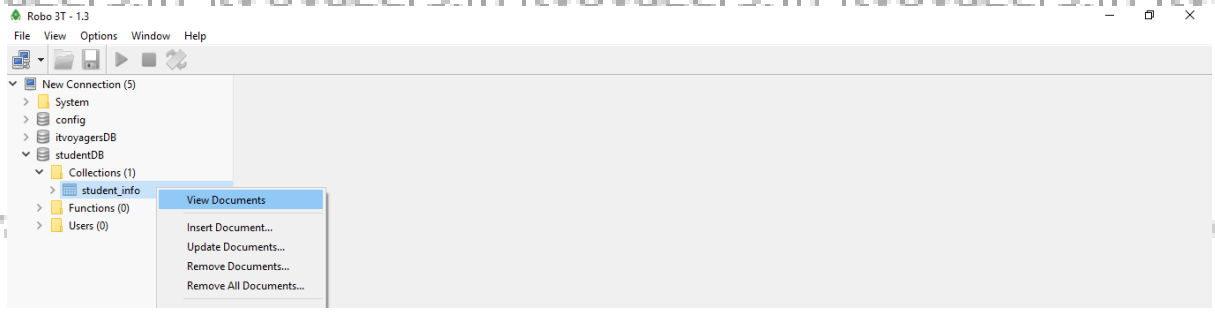
studentinfo.php

```php
<?php
/*
    Author  : ITVoyagers    Website : itvoyagers.in     Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB
    echo "<br><br>Connection Established";
// $stud_collection is reference and "student_info" is collection name
// createCollection() is method to create collection
    $stud_collection = $stud_db -> createCollection("student_info");
    echo "<br><br>Succsessfully Collection created";

    $doc = array( "_id"    => 01,
                  "name"   => "Rawool Vijay Anil",
                  "course" => "MSc. IT" );
// insert() method is use to insert data in collection
    $stud_collection -> insert($doc);
    echo "<br><br>Document inserted succsessfully";

?>
```

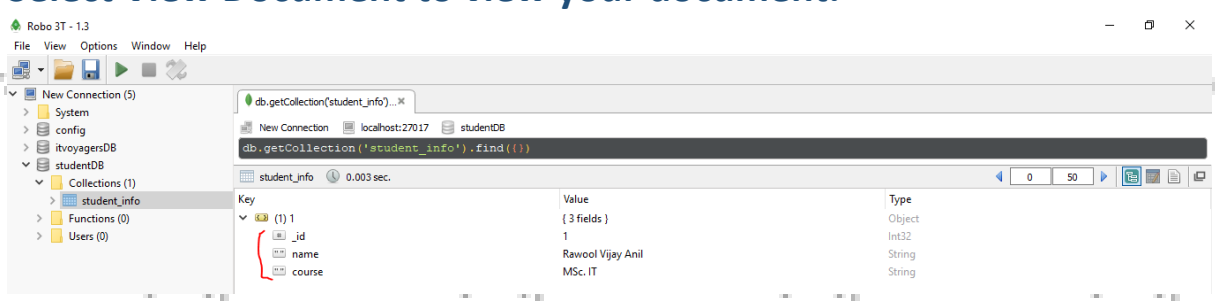
Now run this file in browser(http://localhost/mongodemo/studentinfo.php).



We can also check collection in "Robo 3T".



Select View Document to view your document.

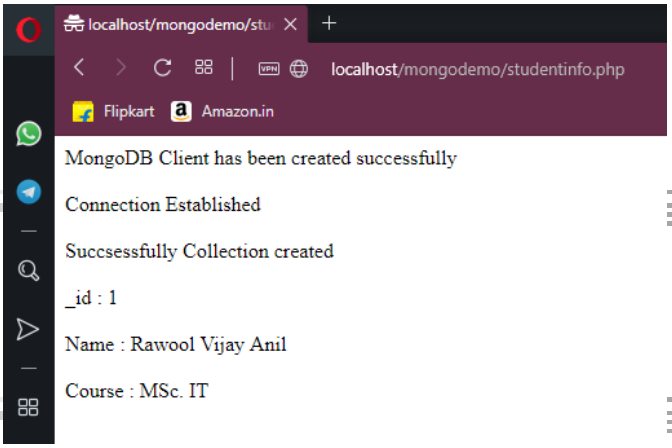


5. Retrieve

studentinfo.php

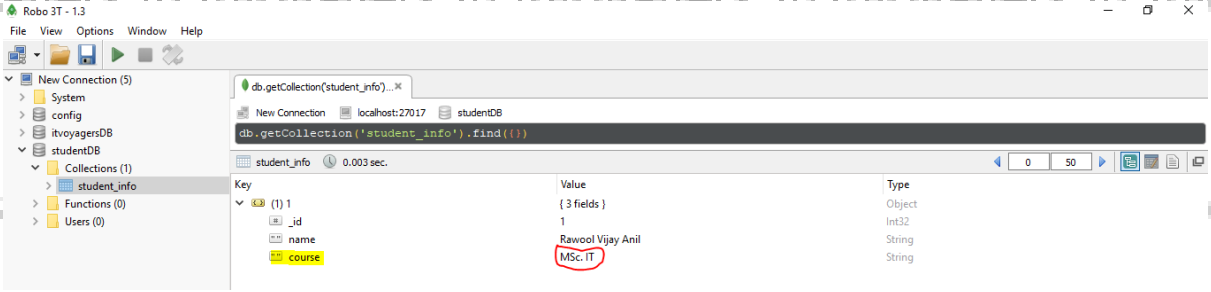
```php
<?php
/*
    Author  : ITVoyagers    Website : itvoyagers.in     Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB
    echo "<br><br>Connection Established";
// $stud_collection is reference and "student_info" is collection name
// createCollection() is method to create collection
    $stud_collection = $stud_db -> createCollection("student_info");
    echo "<br><br>Succsessfully Collection created";
//find() method will return all data from "student_info" collection
    $cursor = $stud_collection -> find();
//we have to loop through $cursor to print values
    foreach ($cursor as $res)
    {
        echo "<br><br> _id : ".$res["_id"];
        echo "<br><br> Name : ".$res["name"];
        echo "<br><br> Course : ".$res["course"];
    }

?>
```

Now run this file in browser(http://localhost/mongodemo/studentinfo.php).



6. Update

Let's update course from "MSc. IT" to "MPhil" in our collection.

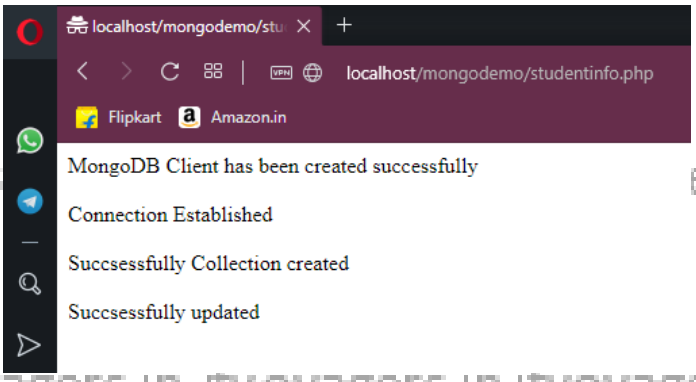


To update document we will use update()

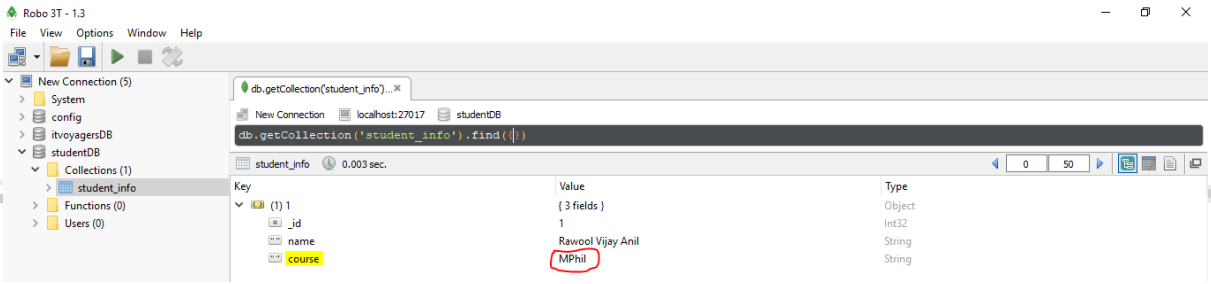
studentinfo.php

```php
<?php
/*
    Author  : ITVoyagers    Website : itvoyagers.in     Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB
    echo "<br><br>Connection Established";
// $stud_collection is reference and "student_info" is collection name
// createCollection() is method to create collection
    $stud_collection = $stud_db -> createCollection("student_info");
    echo "<br><br>Succsessfully Collection created";
//update() will accept 2 arguments
//first argument is the search condition
//second argument is a values which is to be updated
//keep $set in single quotations
    $stud_collection -> update( array("name"=>"Rawool Vijay Anil"),
                                array('$set' => array("course" => "MPhil"))
                              );

    echo "<br><br>Succsessfully updated";
?>
```

Now run this file in browser(http://localhost/mongodemo/studentinfo.php).

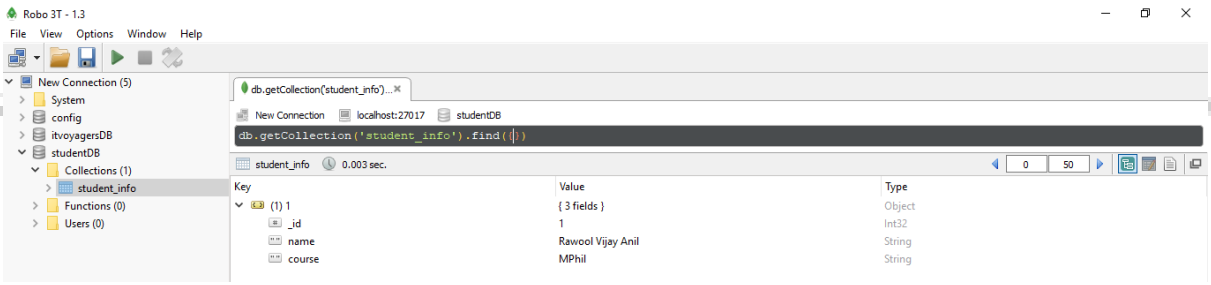


Check updated collection in "Robo 3T".



7. Delete

Let's delete this document from the collection.

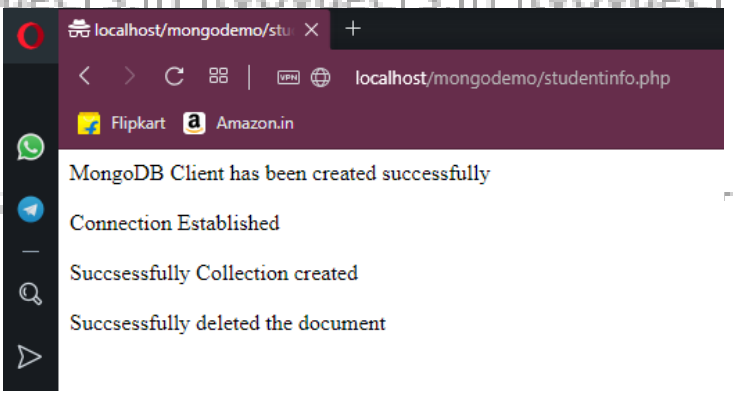


We will use remove() for deleting document from collection.

studentinfo.php

```php
<?php
/*
    Author  : ITVoyagers    Website : itvoyagers.in     Date    : 05th August 2019
*/
// $mdb is instance of MongoCliient() which will help us to access mongoDB
    $mdb = new MongoClient();
// this statement will get execute if there is no error with creating MongoClient()
    echo "MongoDB Client has been created successfully";
// $stud_db is variable which is reference for our database
    $stud_db = $mdb -> studentDB; // studentDB is our database in mongoDB
    echo "<br><br>Connection Established";
// $stud_collection is reference and "student_info" is collection name
// createCollection() is method to create collection
    $stud_collection = $stud_db -> createCollection("student_info");
    echo "<br><br>Succsessfully Collection created";

//remove() will have 2 arguments
//first argument is the condition
//second boolean value which state allow you to delete only one document we will
//set it to false
    $stud_collection -> remove( array("name"=>"Rawool Vijay Anil"),
                                array("justOne" => false));

    echo "<br><br>Succsessfully deleted the document";
?>
```

Now run this file in browser(http://localhost/mongodemo/studentinfo.php).



Check updated collection in “Robo 3T”.

Yes our document has been deleted.