

**Aim:** - Create MongoDB database with the following Data types- String, Integer, Boolean, double, min/max keys, arrays, timestamp, object, Null, symbol, date, object ID, Binary data, Code, Regular Expression

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

### **Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.

### **Procedure: -**

Open your MongoDB Shell and Please enter a MongoDB connection string

Then after write code.

### **Step1:-**

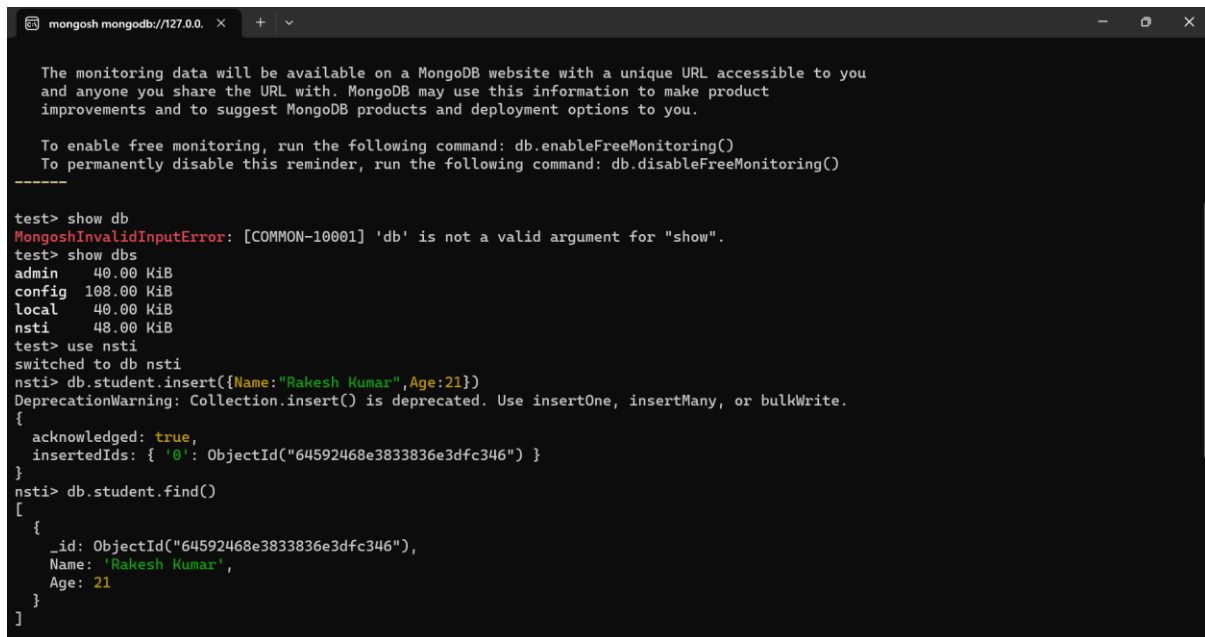
Create database & Table.

After Insert data.

### **Code: -**

```
db.student.insert({Name:"Rakesh Kumar",Age:21})
```

### **Screenshot of code & Output:**



```
mongosh mongodb://127.0.0.1 x + v

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
-----

test> show db
MongoshInvalidInputError: [COMMON-10001] 'db' is not a valid argument for "show".
test> show dbs
admin      40.00 KiB
config    108.00 KiB
local     40.00 KiB
nsti      48.00 KiB
test> use nsti
switched to db nsti
nsti> db.student.insert({Name:"Rakesh Kumar",Age:21})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("64592468e3833836e3dfc346") }
}
nsti> db.student.find()
[
  {
    _id: ObjectId("64592468e3833836e3dfc346"),
    Name: 'Rakesh Kumar',
    Age: 21
  }
]
```

## Step2:

### Code of multiple data add:

```
db.student.insert([[_id:2,Name:"Raushan
Kumar",Age:22,Course:"ADIT"],[_id:3,Name:"Priyanka
Gupta",Age:24,Course:"ADIT"],[_id:4,Name:"Amit
Kumar",Age:28,Course:"ADIT"],[_id:5,Name:"Raju
Kumar",Age:23,Course:"ADIT"]])
```

### Output and Screenshot of code

```
mongosh mongodb://127.0.0.1:27017/
niti> db.student.insert({Name:"Rakesh Kumar",Age:21})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("64592468e3833836e3dfc346") }
}
niti> db.student.find()
[
  {
    _id: ObjectId("64592468e3833836e3dfc346"),
    Name: 'Rakesh Kumar',
    Age: 21
  }
]
niti> db.student.insert([{_id:2,Name:"Raushan Kumar",Age:22,Course:"ADIT"},{_id:3,Name:"Priyanka Gupta",Age:24,Course:"ADIT"},{_id:4,
Name:"Amit Kumar",Age:28,Course:"ADIT"},{_id:5,Name:"Raju Kumar",Age:23,Course:"ADIT"}])
{ acknowledged: true, insertedIds: { '0': 2, '1': 3, '2': 4, '3': 5 } }
niti> db.student.find()
[
  {
    _id: ObjectId("64592468e3833836e3dfc346"),
    Name: 'Rakesh Kumar',
    Age: 21
  },
  {
    _id: 2, Name: 'Raushan Kumar', Age: 22, Course: 'ADIT' },
  {
    _id: 3, Name: 'Priyanka Gupta', Age: 24, Course: 'ADIT' },
  {
    _id: 4, Name: 'Amit Kumar', Age: 28, Course: 'ADIT' },
  {
    _id: 5, Name: 'Raju Kumar', Age: 23, Course: 'ADIT' }
]
niti> Please enter a MongoDB connection string
fwd-i-search: _
```

3 **Aim:** - Insert Document in database.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

## **Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.

## **Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

## **Code: -**

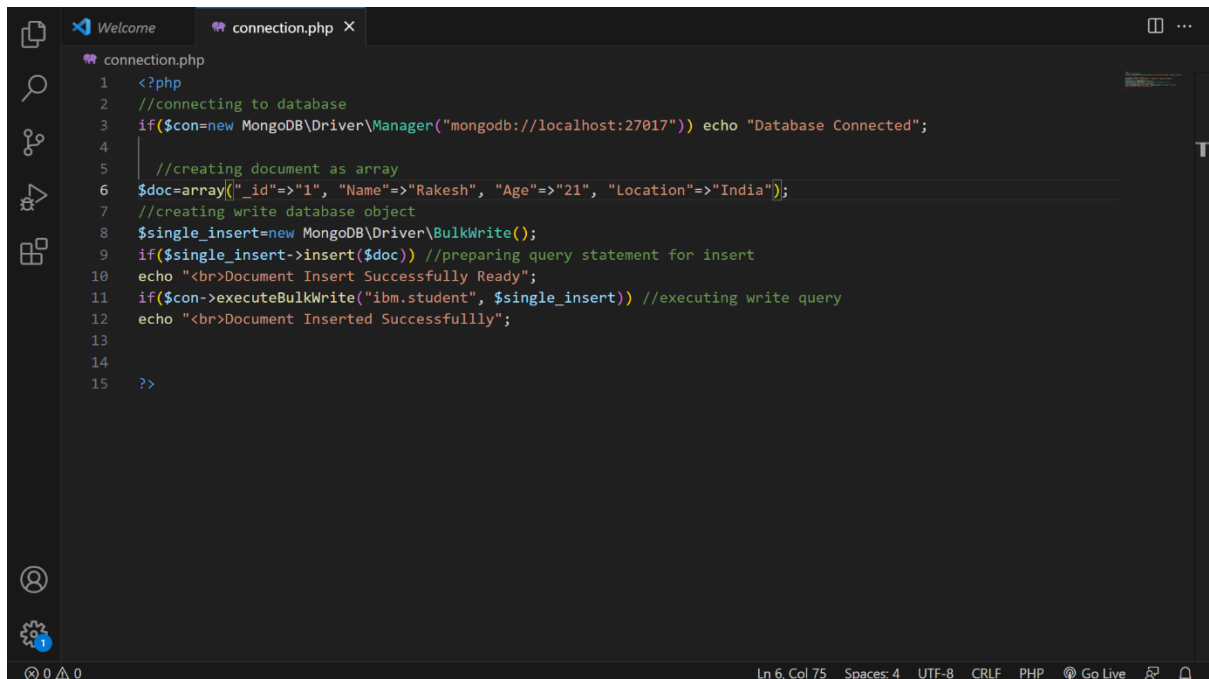
```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database Connected";

//creating document as array
$doc=array("_id"=>"1", "Name"=>"Rakesh", "Age"=>"21",
"Location"=>"India");
//creating write database object
$single_insert=new MongoDB\Driver\BulkWrite();
if($single_insert->insert($doc)) //preparing query statement for
insert
```

```
echo "<br>Document Insert Successfully Ready";  
  
if($con->executeBulkWrite("ibm.student", $single_insert))  
//executing write query  
  
echo "<br>Document Inserted Successfully";
```

?>

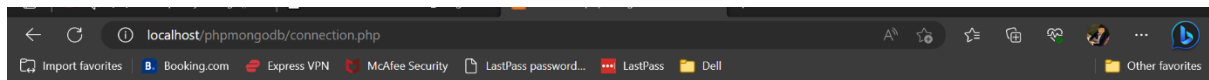
## Screenshot of code:

A screenshot of a code editor window with a dark theme. The editor shows a file named 'connection.php' with 15 lines of PHP code. The code connects to a MongoDB database, creates a document, and inserts it. The output of the code is visible in the terminal area at the bottom. The status bar at the bottom indicates 'Ln 6, Col 75', 'Spaces: 4', 'UTF-8', 'CRLF', 'PHP', and 'Go Live' status.

```
connection.php  
1  <?php  
2  //connecting to database  
3  if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database Connected";  
4  
5  //creating document as array  
6  $doc=array("_id"=>"1", "Name"=>"Rakesh", "Age"=>"21", "Location"=>"India");  
7  //creating write database object  
8  $single_insert=new MongoDB\Driver\BulkWrite();  
9  if($single_insert->insert($doc) //preparing query statement for insert  
10 echo "<br>Document Insert Successfully Ready";  
11 if($con->executeBulkWrite("ibm.student", $single_insert)) //executing write query  
12 echo "<br>Document Inserted Successfully";  
13  
14  
15  ?>
```

## Step2:

## Output of code:

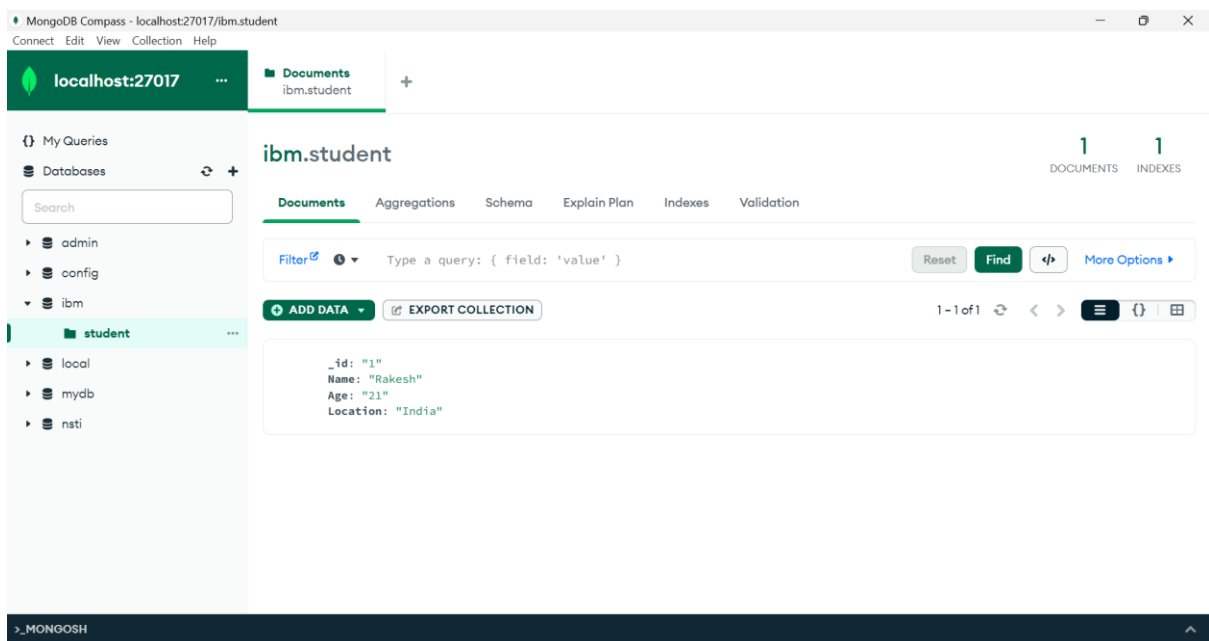


Database Connected  
Document Insert Successfully Ready  
Document Inserted Successfully

## Step2:

Open the mongodb compass and show the data

## Inserting Data of databases of screenshot



4 **Aim:** - Insert Document in database.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

### **Requirement of Hardware & Software: -**

1 Working PC.

2 Windows Operating System.

3 Xampp server and also PHP.

4 MongoDB shell and any browser.

### **Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

#### **Code: -**

```
<?php
//connecting database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database Connected";

//creating write object
$single_update=new MongoDB\Driver\BulkWrite();

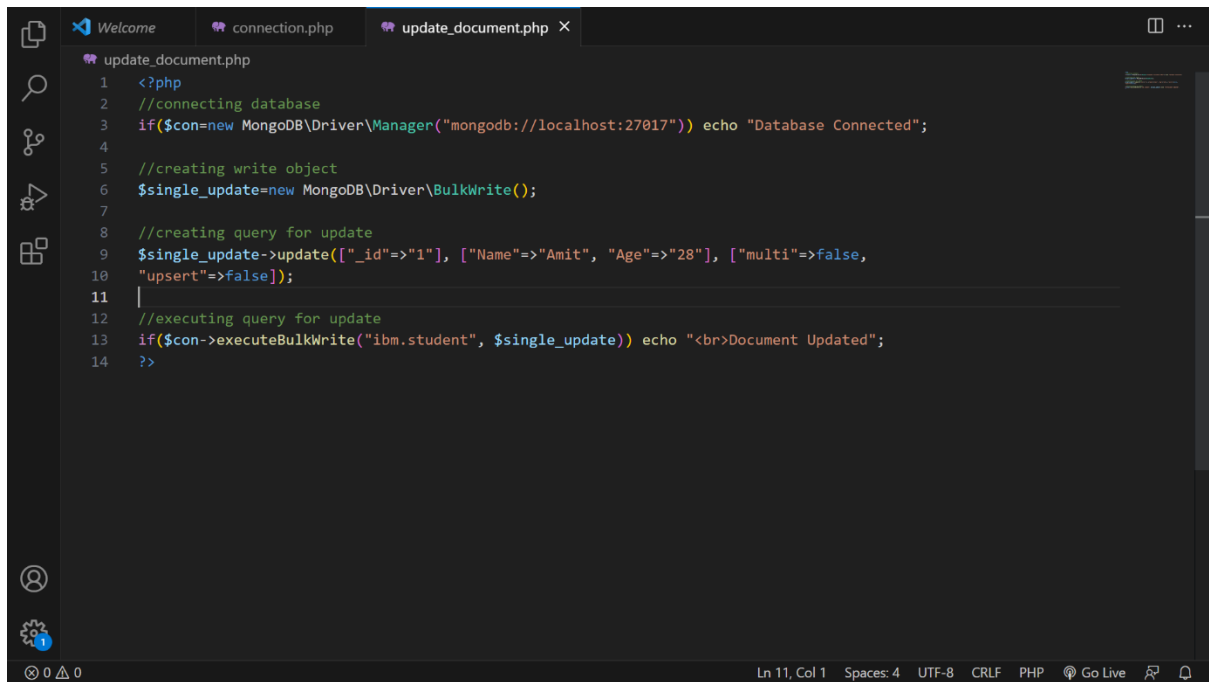
//creating query for update
$single_update->update(["_id"=>"1"], ["Name"=>"Amit",
"Age"=>"28"], ["multi"=>false,
"upsert"=>false]);

//executing query for update
if($con->executeBulkWrite("ibm.student", $single_update)) echo
"<br>Document Updated";

?>
```

#### **Screenshot of code:**

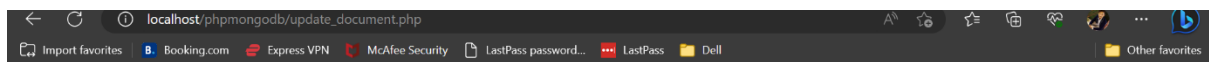




```
1 <?php
2 //connecting database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database Connected";
4
5 //creating write object
6 $single_update=new MongoDB\Driver\BulkWrite();
7
8 //creating query for update
9 $single_update->update(["_id"=>"1"], ["Name"=>"Amit", "Age"=>"28"], ["multi"=>false,
10 "upsert"=>false]);
11
12 //executing query for update
13 if($con->executeBulkWrite("ibm.student", $single_update)) echo "<br>Document Updated";
14 ?>
```

## Step2:

Output of code:



Database Connected  
Document Updated

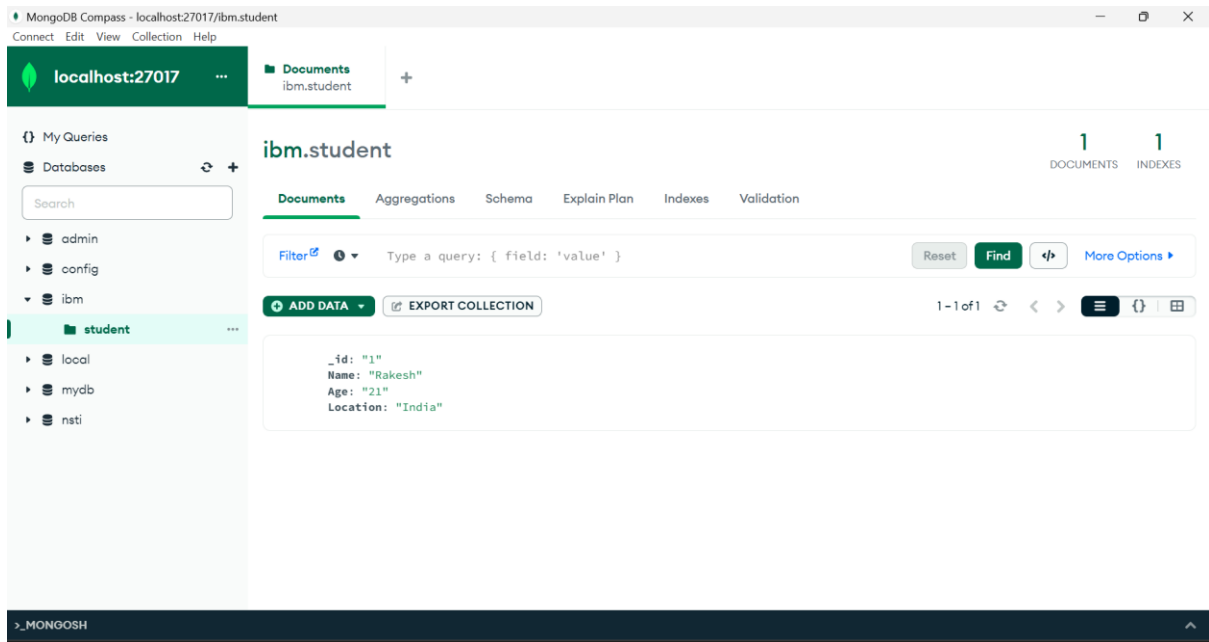
---

## Step3:

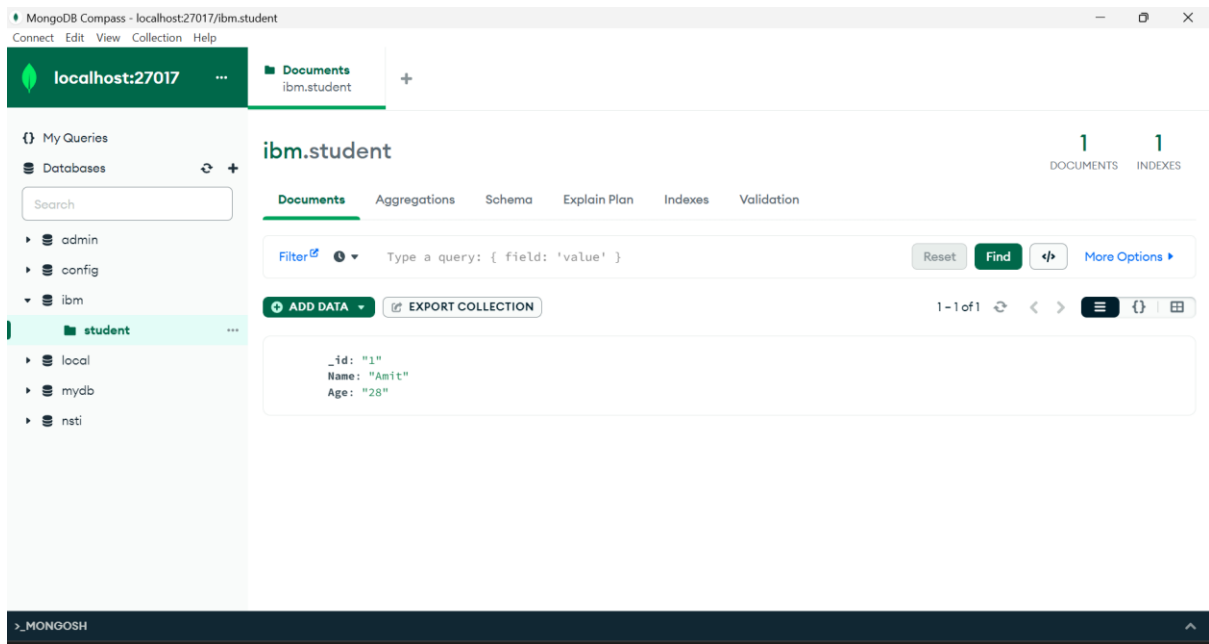
Open the mongodb compass and show the data

Inserting Data of databases of screenshot

## Before submit code



## Then after submit code in database



5 **Aim:** - Delete Document in database.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

### **Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

### **Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

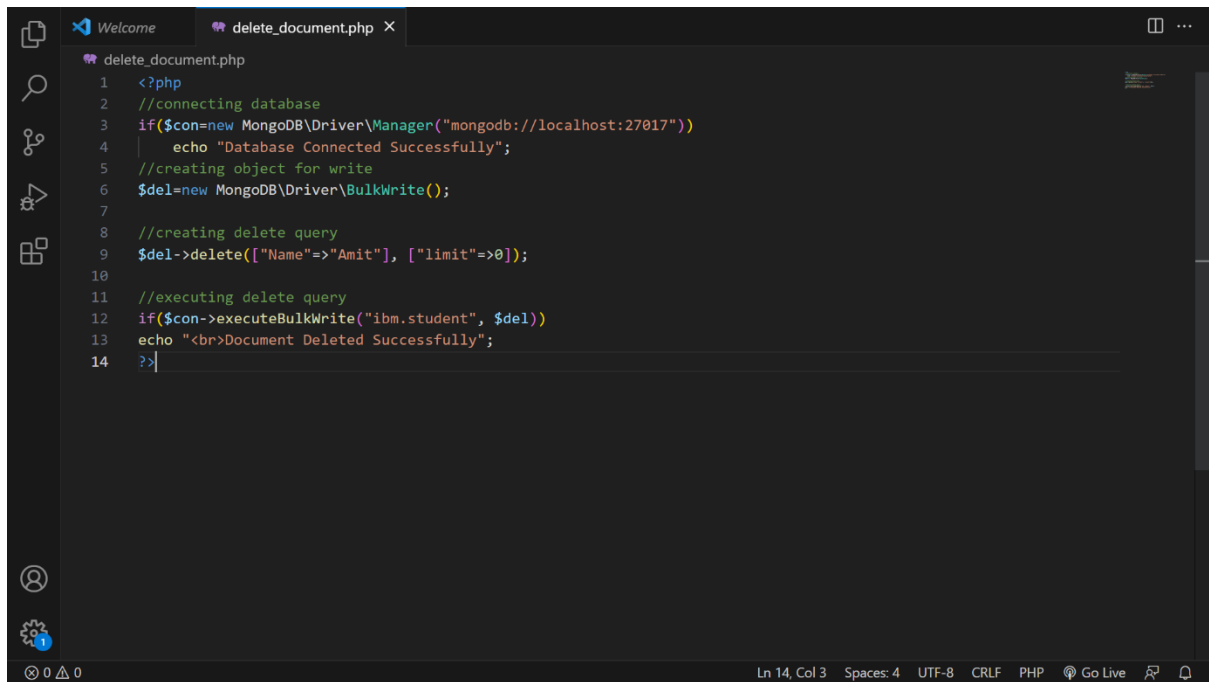
### **Code: -**

```
<?php
//connecting database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017"))
    echo "Database Connected Successfully";
//creating object for write
$del=new MongoDB\Driver\BulkWrite();

//creating delete query
$del->delete(["Name"=>"Amit"], ["limit"=>0]);

//executing delete query
if($con->executeBulkWrite("ibm.student", $del))
echo "<br>Document Deleted Successfully";
?>
```

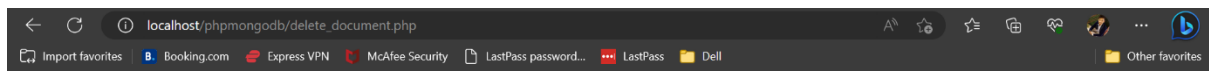
### **Screenshot of code:**



```
1 <?php
2 //connecting database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
4 |   echo "Database Connected Successfully";
5 //creating object for write
6 $del=new MongoDB\Driver\BulkWrite();
7
8 //creating delete query
9 $del->delete(["Name"=>"Amit"], ["limit"=>0]);
10
11 //executing delete query
12 if($con->executeBulkWrite("ibm.student", $del))
13 echo "<br>Document Deleted Successfully";
14 ?>
```

## Step2:

Output of code:



Database Connected Successfully  
Document Deleted Successfully

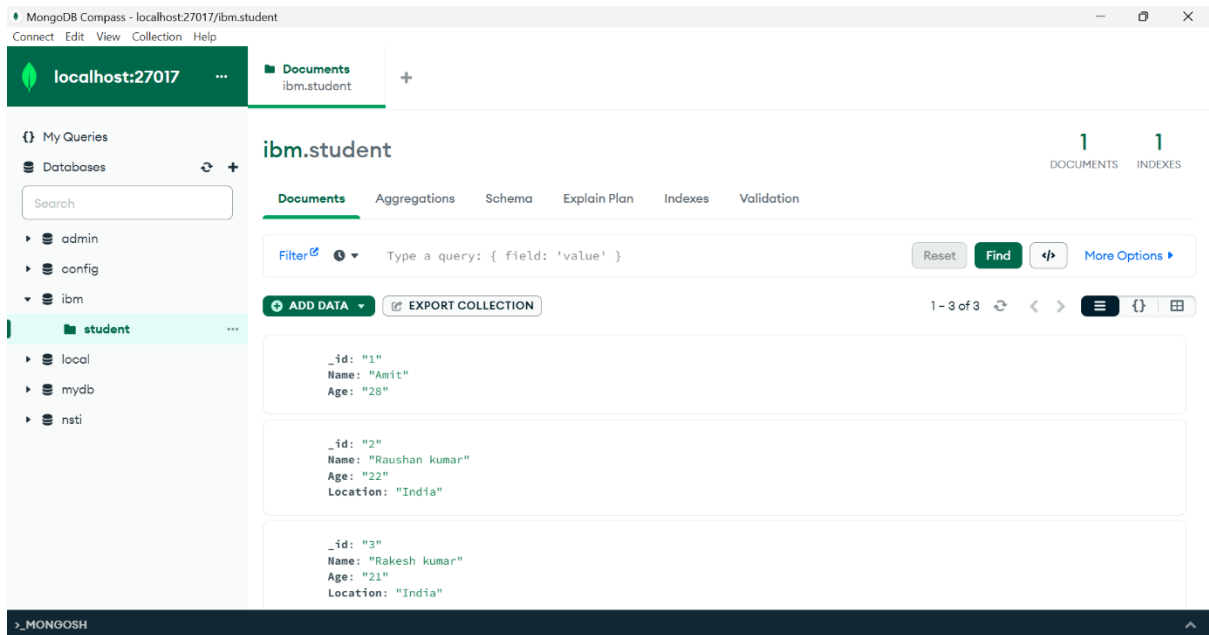
---

## Step3:

Open the mongodb compass and show the data

Inserting Data of databases of screenshot

## Before submit code

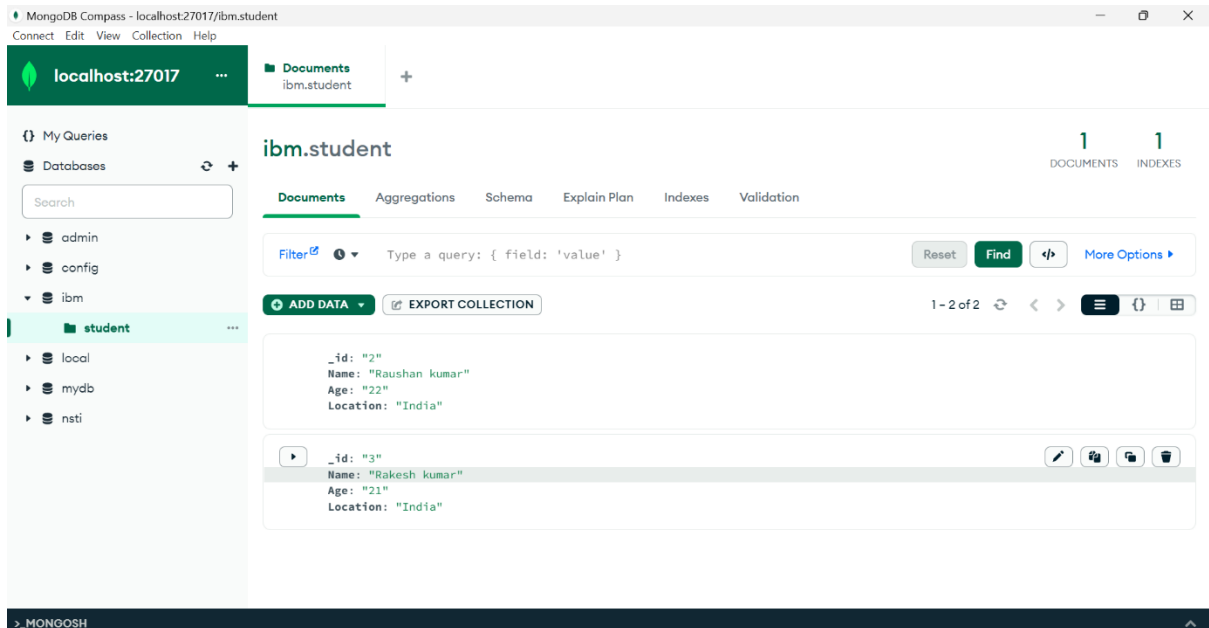


The screenshot shows the MongoDB Compass interface for the 'ibm.student' collection. The left sidebar lists databases and collections, with 'student' selected under the 'ibm' database. The main panel displays the 'Documents' tab for 'ibm.student', showing 1 document and 1 index. The document list contains three entries:

_id	Name	Age	Location
"1"	"Amit"	"28"	
"2"	"Raushan kumar"	"22"	"India"
"3"	"Rakesh kumar"	"21"	"India"

The bottom status bar shows the MongoDB shell prompt: >\_MONGOOSH.

## Then after submit code in database



The screenshot shows the MongoDB Compass interface for the 'ibm.student' collection after a code submission. The document list now contains two entries:

_id	Name	Age	Location
"2"	"Raushan kumar"	"22"	"India"
"3"	"Rakesh kumar"	"21"	"India"

The document with \_id "1" has been removed. The bottom status bar shows the MongoDB shell prompt: >\_MONGOOSH.

**6 Aim:** - Project Document in database.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software:** -

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure:** -

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

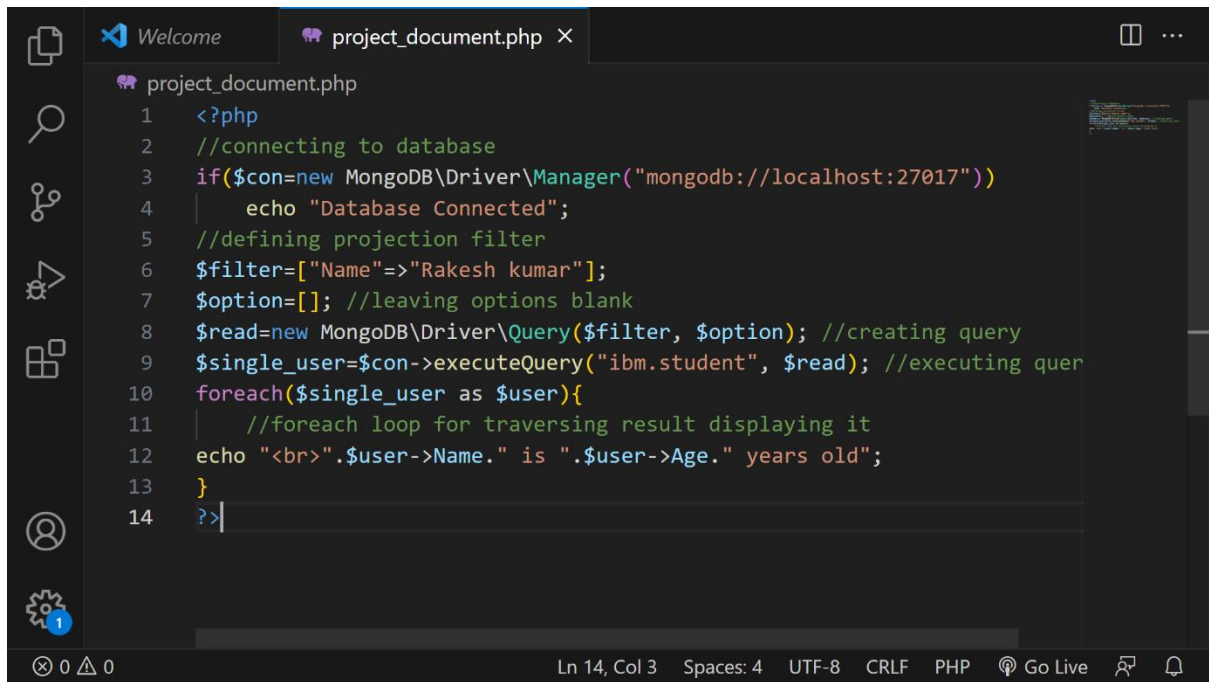
## **Step1:**

### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017"))
    echo "Database Connected";
//defining projection filter
$filter=["Name"=>"Rakesh kumar"];
$options=[]; //leaving options blank
$read=new MongoDB\Driver\Query($filter, $options); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
foreach($single_user as $user){
    //foreach loop for traversing result displaying it
    echo "<br>".$user->Name." is ".$user->Age." years old";
}
?>
```

### **Screenshot of code:**





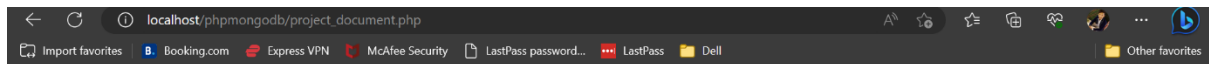
```
1 <?php
2 //connecting to database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
4     echo "Database Connected";
5 //defining projection filter
6 $filter=["Name"=>"Rakesh kumar"];
7 $option=[]; //leaving options blank
8 $read=new MongoDB\Driver\Query($filter, $option); //creating query
9 $single_user=$con->executeQuery("ibm.student", $read); //executing quer
10 foreach($single_user as $user){
11     //foreach loop for traversing result displaying it
12     echo "<br>".$user->Name." is ".$user->Age." years old";
13 }
14 ?>
```

## **Step2:**

### **Go to browser search**

Localhost/phpmongodb/project\_document.php

### **Output of code:**



Database Connected  
Rakesh kumar is 21 years old

---

**7 Aim:** - Create a MongoDB query to display all the document in the collection data (Trainees DATA).

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

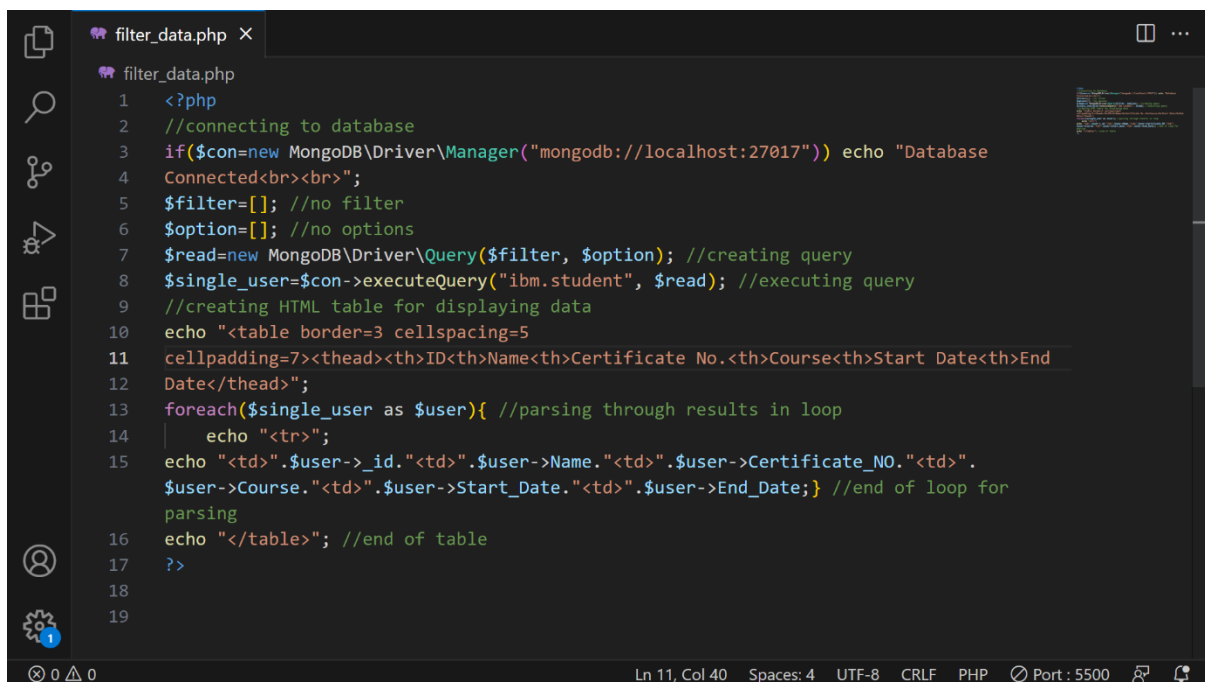
### **Step1:**

#### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database
Connected<br><br>";
$filter=[]; //no filter
$option=[]; //no options
$read=new MongoDB\Driver\Query($filter, $option); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
//creating HTML table for displaying data
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Certificate
No.<th>Course<th>Start Date<th>End
Date</thead>";
foreach($single_user as $user){ //parsing through results in loop
    echo "<tr>";
```

```
echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Certificate_NO."<td>".$user->Course."<td>".$user->Start_Date."<td>".$user->End_Date; } //end of loop for parsing  
echo "</table>"; //end of table  
?>
```

## Screenshot of code:



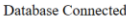
```
filter_data.php X  
filter_data.php  
1 <?php  
2 //connecting to database  
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database  
4 Connected<br><br>";  
5 $filter=[]; //no filter  
6 $option=[]; //no options  
7 $read=new MongoDB\Driver\Query($filter, $option); //creating query  
8 $single_user=$con->executeQuery("ibm.student", $read); //executing query  
9 //creating HTML table for displaying data  
10 echo "<table border=3 cellpadding=5  
11 cellpadding=7><thead><th>ID<th>Name<th>Certificate No.<th>Course<th>Start Date<th>End  
12 Date</thead>";  
13 foreach($single_user as $user){ //parsing through results in loop  
14     echo "<tr>";  
15     echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Certificate_NO."<td>".$  
16     $user->Course."<td>".$user->Start_Date."<td>".$user->End_Date; } //end of loop for  
17     parsing  
18     echo "</table>"; //end of table  
19     ?>
```

## Step2:

## Go to browser search

Localhost/phpmongodb/project\_document.php

## Output of code:



ID	Name	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	17	ADIT	2022	2024
1	Rakesh kumar	12	ADIT	2022	2024
3	Amit kumar	22	ADIT	2021	2023
4	Rajiv kumar	18	ADIT	2022	2024
5	Ramesh kumar	28	ADIT	2020	2022
6	Virendra kumar	19	CITS	2020	2022
7	Anil Talari	14	IBM	2022	2024
8	Dharam Baghel	24	IBM	2022	2024
9	Priyanshu	21	ADIt	2022	2024
10	Priyanka	31	IBM	2022	2024
11	Rahul kumar	34	IBM	2020	2022
12	Aman kumar	14	ADIT	2022	2024

**8 Aim:** - Create a MongoDB query to display the fields id, trainee name, Lab name Certificate No., course title, course starting date, course ending date for all the documents in the collection trainees data.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

### **Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

### **Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database
Connected<br><br>";
```

```

$filter=[]; //no filter
$option=[]; //no options
$read=new MongoDB\Driver\Query($filter, $option); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
//creating HTML table for displaying data
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start Date<th>End
Date</thead>";
foreach($single_user as $user){ //parsing through results in loop
    echo "<tr>";
    echo "<td>".$user->_id."<td>".$user->Name."<td>".$user-
>Lab."<td>".$user->Certificate_NO."<td>".$user-
>Course."<td>".$user->Start_Date."<td>".$user->End_Date;} //end of
loop for parsing
echo "</table>"; //end of table
?>

```

**Screenshot of code:**

```
filter_data.php X lab.php
filter_data.php
1 <?php
2 //connecting to database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database
4 Connected<br><br>";
5 $filter=[]; //no filter
6 $option=[]; //no options
7 $read=new MongoDB\Driver\Query($filter, $option); //creating query
8 $single_user=$con->executeQuery("ibm.student", $read); //executing query
9 //creating HTML table for displaying data
10 echo "<table border=3 cellpadding=5
11 cellspacing=5><thead><th>ID<th>Name<th>Lab<th>Certificate No.<th>Course<th>Start Date<th>End
12 Date</thead>";
13 foreach($single_user as $user){ //parsing through results in loop
14     echo "<tr>";
15     echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course.
16     "<td>".$user->Start_Date."<td>".$user->End_Date; } //end of loop for parsing
17     echo "</table>"; //end of table
18     ?>
19
```

## Step2:

## Go to browser search

localhost/phpmongodb/project\_document.php

## Output of code:

Database Connected

ID	Name	Lab	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	PHP	17	ADIT	2022	2024
1	Rakesh kumar	HTML	12	ADIT	2022	2024
3	Amit kumar	CSS	22	ADIT	2021	2023
4	Rajiv kumar	PHP	18	ADIT	2022	2024
5	Ramesh kumar	PHYTHON	28	ADIT	2020	2022
6	Virendra kumar	MONGO	19	CITS	2020	2022
7	Anil Talari	PHP	14	IBM	2022	2024
8	Dharam Baghel	HTML	24	IBM	2022	2024
9	Priyanshu	CSS	21	ADIt	2022	2024
10	Priyanka	MONGO	31	IBM	2022	2024
11	Rahul kumar	PHYTHON	34	IBM	2020	2022
12	Aman kumar	PHP	14	ADIT	2022	2024



**9 Aim:** - Create a MongoDB query to display the fields id, trainee name, lab name, Certificate No., course name, course starting date, the course ending date for all the documents in the collection trainee's data, but excluding lab name

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.

5 PHP-MongoDB driver 8.0.1

### **Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database
Connected<br><br>";
$filter=[]; //no filter
$option=[]; //no options
$read=new MongoDB\Driver\Query($filter, $option); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
//creating HTML table for displaying data
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start Date<th>End
Date</thead>";
foreach($single_user as $user){ //parsing through results in loop
```

```

    echo "<tr>";

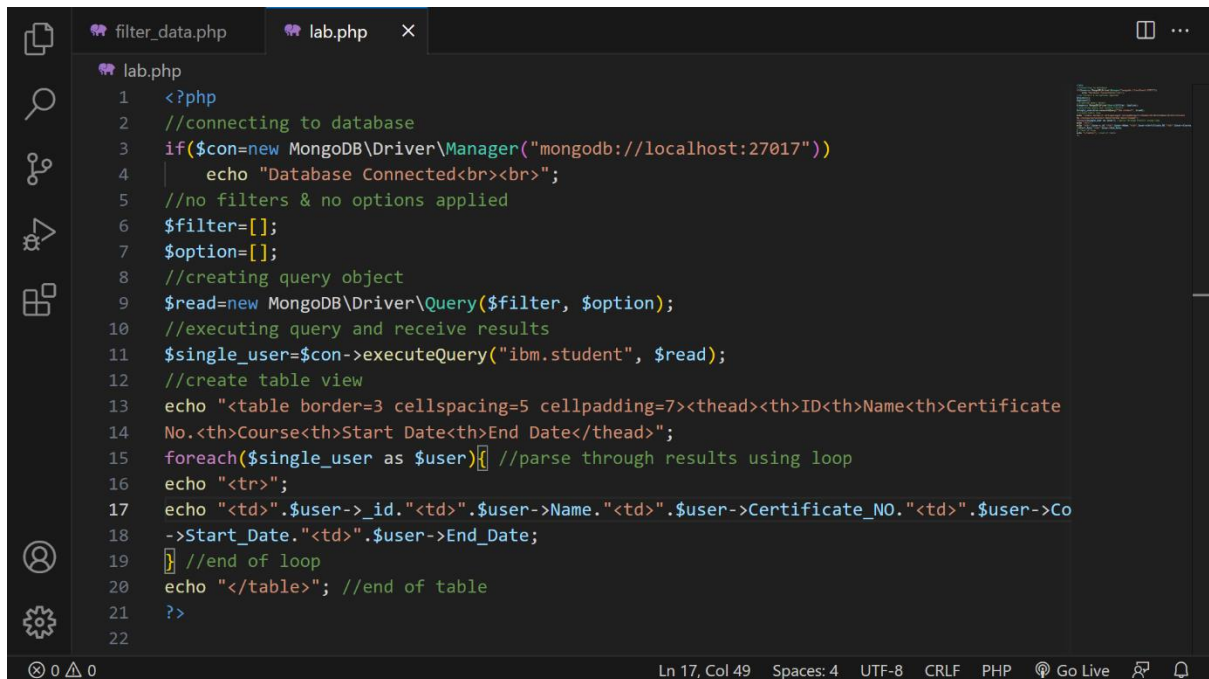
    echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course."<td>".$user->Start_Date."<td>".$user->End_Date;} //end of
    loop for parsing

    echo "</table>"; //end of table

?>

```

## Screenshot of code:



```

1  <?php
2  //connecting to database
3  if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
4  |   echo "Database Connected<br><br>";
5  //no filters & no options applied
6  $filter=[];
7  $option=[];
8  //creating query object
9  $read=new MongoDB\Driver\Query($filter, $option);
10 //executing query and receive results
11 $single_user=$con->executeQuery("ibm.student", $read);
12 //create table view
13 echo "<table border=3 cellpadding=7><thead><th>ID<th>Name<th>Certificate
14 No.<th>Course<th>Start Date<th>End Date</thead>";
15 foreach($single_user as $user){ //parse through results using loop
16 echo "<tr>";
17 echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Certificate_NO."<td>".$user->Co
18 ->Start_Date."<td>".$user->End_Date;
19 } //end of loop
20 echo "</table>"; //end of table
21 ?>
22

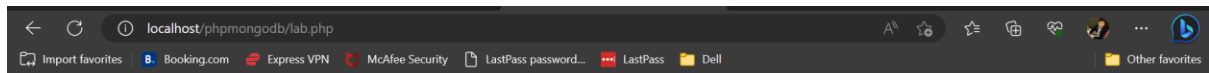
```

## Step2:

## Go to browser search

Localhost/phpmongodb/project\_document.php

## Output of code:



ID	Name	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	17	ADIT	2022	2024
1	Rakesh kumar	12	ADIT	2022	2024
3	Amit kumar	22	ADIT	2021	2023
4	Rajiv kumar	18	ADIT	2022	2024
5	Ramesh kumar	28	ADIT	2020	2022
6	Virendra kumar	19	CITS	2020	2022
7	Anil Talari	14	IBM	2022	2024
8	Dharam Baghel	24	IBM	2022	2024
9	Priyanshu	21	ADIt	2022	2024
10	Priyanka	31	IBM	2022	2024
11	Rahul kumar	34	IBM	2020	2022
12	Aman kumar	14	ADIT	2022	2024

**10 Aim:** - Create a MongoDB query to display all the trainees who attended courses on PHP.

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

1 Working PC.

2 Windows Operating System.

3 Xampp server and also PHP.

4 MongoDB shell and any browser.

5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

**Step1:**

**Code: -**

```
<?php
//connecting to database
if ($con = new
MongoDB\Driver\Manager("mongodb://localhost:27017")) {
    echo "Database Connected<br><br>";
}
```

```

$filter = ['Lab' => 'PHP']; //no filters
$option = []; //options to eliminate lab column from result
$read = new MongoDB\Driver\Query($filter, $option); //creating
query
$single_user = $con->executeQuery("ibm.student", $read);
//executing query

//creating table view without column for lab
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start Date<th>End Date</thead>";
foreach($single_user as $user){ //parsing results in loop
    echo "<tr>";
    echo "<td>".$user->_id."<td>".$user->Name."<td>".$user-
>Lab."<td>".$user->Certificate_NO."<td>".$user-
>Course."<td>".$user->Start_Date."<td>".$user-
>End_Date."</td></tr>";
} //end loop
echo "</table>"; //end table
?>

```

**Screenshot of code:**

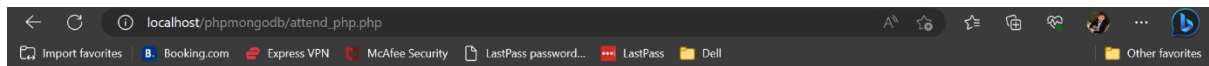
```
attend_php.php X
attend_php.php
1
2
3 <?php
4 //connecting to database
5 if ($con = new MongoDB\Driver\Manager("mongodb://localhost:27017")) {
6     echo "Database Connected<br><br>";
7 }
8
9 $filter = ['Lab' => 'PHP']; //no filters
10 $option = []; //options to eliminate lab column from result
11 $read = new MongoDB\Driver\Query($filter, $option); //creating query
12 $single_user = $con->executeQuery("ibm.student", $read); //executing query
13
14 //creating table view without column for lab
15 echo "<table border=3 cellpadding=7><thead><th>ID</th><th>Name</th><th>Lab</th><th>Certificate
16 No.</th><th>Course</th><th>Start Date</th><th>End Date</th></thead>";
17 foreach($single_user as $user){ //parsing results in loop
18     echo "<tr>";
19     echo "<td>".$user->_id."</td>".$user->Name."</td>".$user->Lab."</td>".$user->Certificate_NO."</td>".
20     $user->Course."</td>".$user->Start_Date."</td>".$user->End_Date."</td></tr>";
21 } //end loop
22 echo "</table>"; //end table
23 ?>
```

## Step2:

## Go to browser search

localhost/phpmongodb/project\_document.php

## Output of code:



Database Connected

ID	Name	Lab	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	PHP	17	ADIT	2022	2024
4	Rajiv kumar	PHP	18	ADIT	2022	2024
7	Anil Talari	PHP	14	IBM	2022	2024
12	Aman kumar	PHP	14	ADIT	2022	2024

**11 Aim:** - Create a MongoDB query to display the 1<sup>st</sup> batch trainees of PHP

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure: -**



Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

#### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database
Connected<br><br>";
$filter = ['Lab' => 'PHP', 'Start_Date' => '2018'];
//no filters
$options=[]; //options to eliminate lab column from result
$read=new MongoDB\Driver\Query($filter, $options); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
//creating table view without column for lab
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start Date<th>End Date</thead>";
foreach($single_user as $user){ //parsing results in loop
```

```

echo "<tr>";

echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course."<td>".$user->Start_Date."<td>".$user->End_Date;

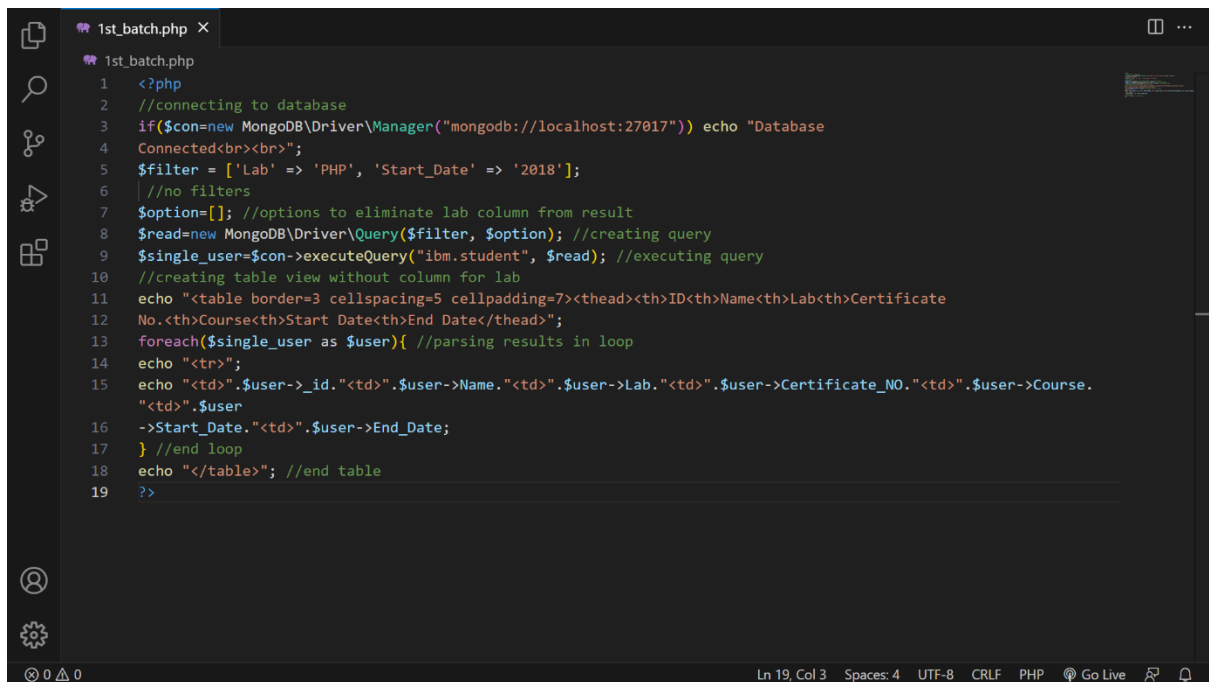
} //end loop

echo "</table>"; //end table

?>

```

## Screenshot of code:



```

1  <?php
2  //connecting to database
3  if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database
4  Connected<br><br>";
5  $filter = ['Lab' => 'PHP', 'Start_Date' => '2018'];
6  //no filters
7  $option=[]; //options to eliminate lab column from result
8  $read=new MongoDB\Driver\Query($filter, $option); //creating query
9  $single_user=$con->executeQuery("ibm.student", $read); //executing query
10 //creating table view without column for lab
11 echo "<table border=3 cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
12 No.<th>Course<th>Start Date<th>End Date</thead>";
13 foreach($single_user as $user){ //parsing results in loop
14 echo "<tr>";
15 echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course.
16 "<td>".$user->Start_Date."<td>".$user->End_Date;
17 } //end loop
18 echo "</table>"; //end table
19 ?>

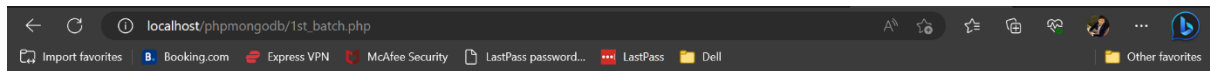
```

## Step2:

## Go to browser search

Localhost/phpmongodb/project\_document.php

## Output of code:



Database Connected

ID	Name	Lab	Certificate No.	Course	Start Date	End Date
4	Rajiv kumar	PHP	18	ADIT	2018	2020
7	Anil Talari	PHP	14	IBM	2018	2020

**12 Aim:** - Create a MongoDB query to display the 1<sup>st</sup> batch trainees of PHP

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

**Step1:**

**Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017")) echo
"Database
Connected<br><br>";
```

```

$filter = ['Lab' => 'PHP', 'Start_Date' => '2022'];
//no filters
$option=[]; //options to eliminate lab column from result
$read=new MongoDB\Driver\Query($filter, $option); //creating
query
$single_user=$con->executeQuery("ibm.student", $read);
//executing query
//creating table view without column for lab
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start Date<th>End Date</thead>";
foreach($single_user as $user){ //parsing results in loop
echo "<tr>";
echo "<td>".$user->_id."<td>".$user->Name."<td>".$user-
>Lab."<td>".$user->Certificate_NO."<td>".$user-
>Course."<td>".$user
->Start_Date."<td>".$user->End_Date;
} //end loop
echo "</table>"; //end table
?>

```

### **Screenshot of code:**

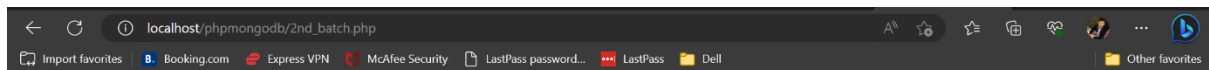
```
2nd_batch.php X
2nd_batch.php
1 <?php
2 //connecting to database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017")) echo "Database
4 Connected<br><br>";
5 $filter = ['Lab' => 'PHP', 'Start_Date' => '2022'];
6 //no filters
7 $option=[]; //options to eliminate lab column from result
8 $read=new MongoDB\Driver\Query($filter, $option); //creating query
9 $single_user=$con->executeQuery("ibm.student", $read); //executing query
10 //creating table view without column for lab
11 echo "<table border=3 cellpadding=5 cellspacing=7><thead><th>ID<th>Name<th>Lab<th>Certificate
12 No.<th>Course<th>Start Date<th>End Date</thead>";
13 foreach($single_user as $user){ //parsing results in loop
14 echo "<tr>";
15 echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course.
16 "<td>".$user
17 ->Start_Date."<td>".$user->End_Date;
18 } //end loop
19 echo "</table>"; //end table
20 ?>
```

## Step2:

## Go to browser search

localhost/phpmongodb/project\_document.php

## Output of code:



Database Connected

ID	Name	Lab	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	PHP	17	ADIT	2022	2024
12	Aman kumar	PHP	14	ADIT	2022	2024

**13 Aim:** - Create a MongoDB query to find the course where maximum trainees attended

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

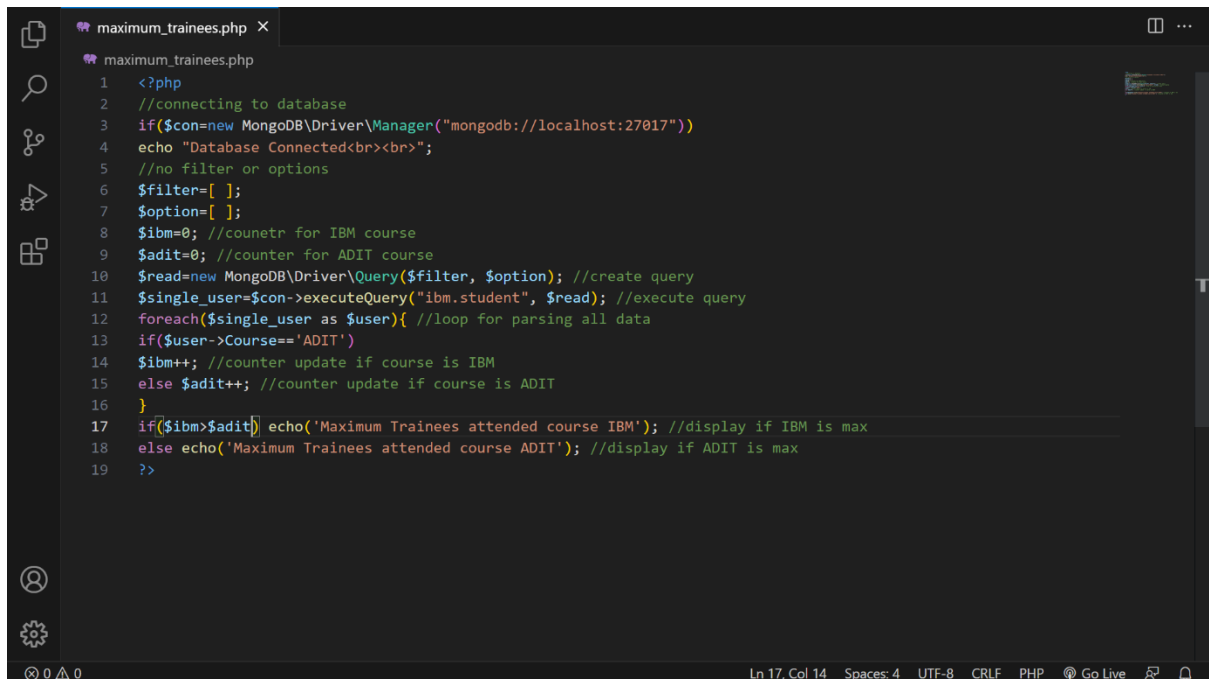
#### **Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017"))
echo "Database Connected<br><br>";
//no filter or options
$filter=[ ];
$option=[ ];
$ibm=0; //counetr for IBM course
$adit=0; //counter for ADIT course
$read=new MongoDB\Driver\Query($filter, $option); //create query
$single_user=$con->executeQuery("ibm.student", $read); //execute
query
foreach($single_user as $user){ //loop for parsing all data
if($user->Course=='ADIT')
$ibm++; //counter update if course is IBM
else $adit++; //counter update if course is ADIT
```



```
}  
  
if($ibm>$adit) echo('Maximum Trainees attended course IBM');  
//display if IBM is max  
  
else echo('Maximum Trainees attended course ADIT'); //display if  
ADIT is max  
  
?>
```

## Screenshot of code:



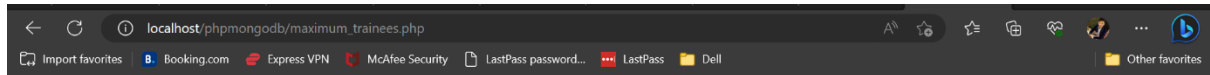
```
maximum_trainees.php X  
maximum_trainees.php  
1 <?php  
2 //connecting to database  
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))  
4 echo "Database Connected<br><br>";  
5 //no filter or options  
6 $filter=[ ];  
7 $option=[ ];  
8 $ibm=0; //count for IBM course  
9 $adit=0; //counter for ADIT course  
10 $read=new MongoDB\Driver\Query($filter, $option); //create query  
11 $single_user=$con->executeQuery("ibm.student", $read); //execute query  
12 foreach($single_user as $user){ //loop for parsing all data  
13 if($user->Course=='ADIT')  
14 $ibm++; //counter update if course is IBM  
15 else $adit++; //counter update if course is ADIT  
16 }  
17 if($ibm>$adit) echo('Maximum Trainees attended course IBM'); //display if IBM is max  
18 else echo('Maximum Trainees attended course ADIT'); //display if ADIT is max  
19 ?>
```

## Step2:

## Go to browser search

Localhost/phpmongodb/project\_document.php

## Output of code:



Database Connected

Maximum Trainees attended course ADIT

---

**14 Aim:** - Create a MongoDB query to find the course where maximum trainees attended

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

1 Working PC.

2 Windows Operating System.

3 Xampp server and also PHP.

4 MongoDB shell and any browser.

5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

**Step1:**

**Code: -**

```
<?php
//connecting to database
if($con=new
MongoDB\Driver\Manager("mongodb://localhost:27017"))
echo "Database Connected<br><br>";
$filter=[ ]; //no filters
```

```

$option=[ 'sort'=>['Lab'=>1] ]; //sorting options on course name
$read=new MongoDB\Driver\Query($filter, $option); //create query
$single_user=$con->executeQuery("ibm.student", $read); //execute
query
//create table view
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start
Date<th>End Date</thead>";
foreach($single_user as $user){ //parsing results though loop
echo "<tr>";
echo
"<td>".$user->_id."<td>".$user->Name."<td>".$user-
>Lab."<td>".$user->Certificate_NO."<td>".$user-
>Course."<td>".$user->Start_Date."<td>".$user->End_Date;
} //end loop
echo "</table>"; //end table
?>

```

### **Screenshot of code:**

```
labwise_find.php X
labwise_find.php
1 <?php
2 //connecting to database
3 if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
4 echo "Database Connected<br><br>";
5 $filter=[ ]; //no filters
6 $option=[ 'sort'=>['Lab'=>1] ]; //sorting options on course name
7 $read=new MongoDB\Driver\Query($filter, $option); //create query
8 $single_user=$con->executeQuery("ibm.student", $read); //execute query
9 //create table view
10 echo "<table border=3 cellpadding=5
11 cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate No.<th>Course<th>Start
12 Date<th>End Date</thead>";
13 foreach($single_user as $user){ //parsing results through loop
14 echo "<tr>";
15 echo
16 "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user->Certificate_NO."<td>".$user->Course."<td>".
17 $user->Start_Date."<td>".$user->End_Date;
18 } //end loop
19 echo "</table>"; //end table
20 ?>
```

## Step2:

## Go to browser search

localhost/phpmongodb/project\_document.php

## Output of code:

Database Connected

ID	Name	Lab	Certificate No.	Course	Start Date	End Date
3	Amit kumar	CSS	22	ADIT	2021	2023
9	Priyanshu	CSS	21	ADIt	2022	2024
1	Rakesh kumar	HTML	12	ADIT	2022	2024
8	Dharam Baghel	HTML	24	IBM	2022	2024
6	Virendra kumar	MONGO	19	CITS	2020	2022
10	Priyanka	MONGO	31	IBM	2022	2024
2	Raushan kumar	PHP	17	ADIT	2022	2024
4	Rajiv kumar	PHP	18	ADIT	2018	2020
7	Anil Talari	PHP	14	IBM	2018	2020
12	Aman kumar	PHP	14	ADIT	2022	2024
5	Ramesh kumar	PHYTHON	28	ADIT	2020	2022
11	Rahul kumar	PHYTHON	34	IBM	2020	2022

**15 Aim:** - Create a MongoDB query to find the course where maximum trainees attended

**Learning outcome:** - Able to configure embedded databases with different web pages using MongoDB.

**Requirement of Hardware & Software: -**

- 1 Working PC.
- 2 Windows Operating System.
- 3 Xampp server and also PHP.
- 4 MongoDB shell and any browser.
- 5 PHP-MongoDB driver 8.0.1

**Procedure: -**

Open your Visual studio code and Please enter a MongoDB connection code

Then after write code.

### **Step1:**

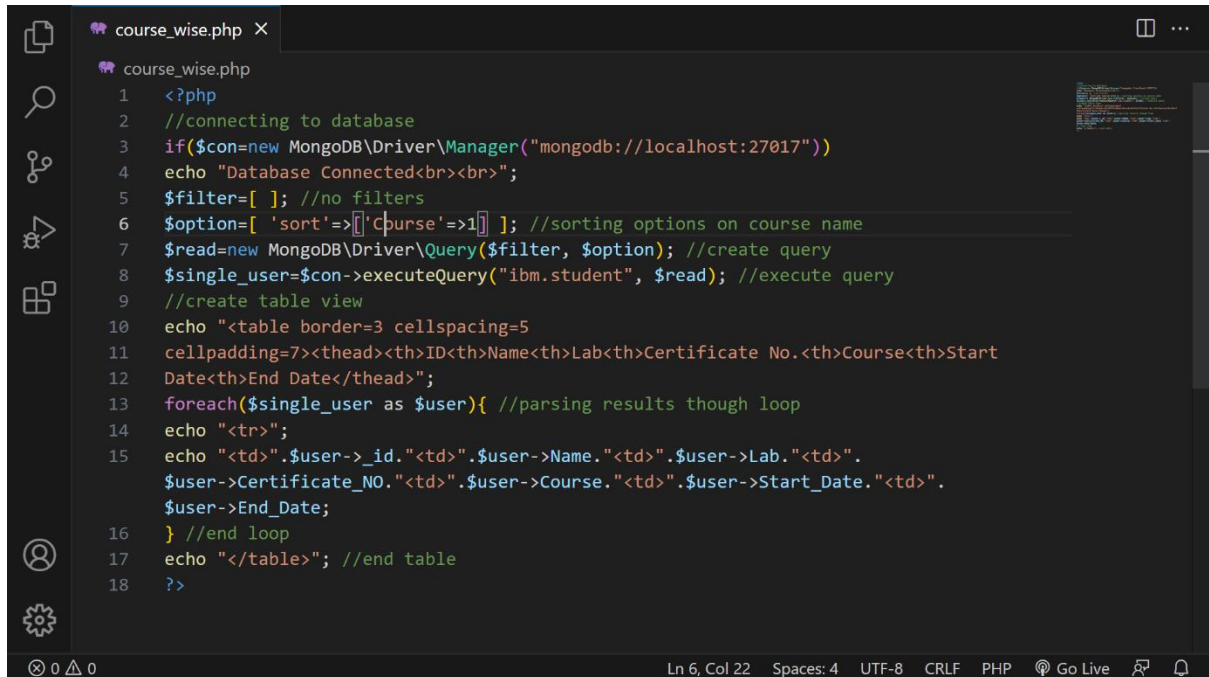
#### **Code: -**

```
<?php
//connecting to database
if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
echo "Database Connected<br><br>";
$filter=[ ]; //no filters
$option=[ 'sort'=>['Course'=>1] ]; //sorting options on course name
$read=new MongoDB\Driver\Query($filter, $option); //create query
$single_user=$con->executeQuery("ibm.student", $read); //execute query
//create table view
echo "<table border=3 cellpadding=5
cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate
No.<th>Course<th>Start
Date<th>End Date</thead>";
foreach($single_user as $user){ //parsing results though loop
echo "<tr>";
echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".$user-
>Certificate_NO."<td>".$user->Course."<td>".$user->Start_Date."<td>".$user-
>End_Date;
} //end loop
```

```
echo "</table>"; //end table
```

```
?>
```

## Screenshot of code:



```
course_wise.php X
course_wise.php
1  <?php
2  //connecting to database
3  if($con=new MongoDB\Driver\Manager("mongodb://localhost:27017"))
4  echo "Database Connected<br><br>";
5  $filter=[ ]; //no filters
6  $option=[ 'sort'=>['Course'=>1] ]; //sorting options on course name
7  $read=new MongoDB\Driver\Query($filter, $option); //create query
8  $single_user=$con->executeQuery("ibm.student", $read); //execute query
9  //create table view
10 echo "<table border=3 cellpadding=5
11 cellpadding=7><thead><th>ID<th>Name<th>Lab<th>Certificate No.<th>Course<th>Start
12 Date<th>End Date</thead>";
13 foreach($single_user as $user){ //parsing results through loop
14 echo "<tr>";
15 echo "<td>".$user->_id."<td>".$user->Name."<td>".$user->Lab."<td>".
16 $user->Certificate_NO."<td>".$user->Course."<td>".$user->Start_Date."<td>".
17 $user->End_Date;
18 } //end loop
19 echo "</table>"; //end table
20 ?>
```

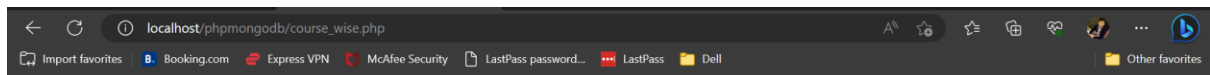
## Step2:

### Go to browser search

Localhost/phpmongodb/project\_document.php

### Output of code:





ID	Name	Lab	Certificate No.	Course	Start Date	End Date
2	Raushan kumar	PHP	17	ADIT	2022	2024
1	Rakesh kumar	HTML	12	ADIT	2022	2024
3	Amit kumar	CSS	22	ADIT	2021	2023
4	Rajiv kumar	PHP	18	ADIT	2018	2020
5	Ramesh kumar	PHYTHON	28	ADIT	2020	2022
9	Priyanshu	CSS	21	ADIT	2022	2024
12	Aman kumar	PHP	14	ADIT	2022	2024
6	Virendra kumar	MONGO	19	CITS	2020	2022
7	Anil Talari	PHP	14	IBM	2018	2020
8	Dharam Baghel	HTML	24	IBM	2022	2024
10	Priyanka	MONGO	31	IBM	2022	2024
11	Rahul kumar	PHYTHON	34	IBM	2020	2022