PHP and MongoDB

1. Connection & Database Selection > Write a PHP script that:

- Connects to MongoDB.
- Selects the "university" database.
- Ensures that if the database or collection ("students") does not exist, it gets created automatically.

2. Insert Multiple Documents > Modify your script to:

- Insert at least 5 student records into the "students" collection in one go.
- Each document should have: name, roll_number, email, course, marks (as an array of subjects and scores).

Example Document:

```
{
"name": "Amit Sharma",
"roll_number": "B23CS101",
"email": "amit@college.edu",
"course": "BTech CSE",
"marks": {
"maths": 85,
"physics": 78,
"computer_science": 92
}
}
```

3. Search & Display Specific Data > Write a PHP script that:

- Accepts a roll number as input from an HTML form.
- Fetches and displays that student's name, email, and marks in a structured HTML format.

4. Calculate Average Marks

- Use MongoDB aggregation to calculate the average marks of all students.
- Displays the result as > The average marks of students: 82.5

5. Indexing & Performance Optimization > Modify the "students" collection by:

- Creating an index on the roll_number field to optimize search queries.
- Write a PHP script to check if the index exists.