**Task 1: Write about MongoDB**

**Scalability:**   
MongoDB handles high traffic using two concepts called,

1. **Vertical scaling:** It upgrades server resources such as RAM, CPU
2. **Horizontal Scaling:** It means, it adds more servers and split data across those servers.

**Resilience:**  
MongoDB always available even during failures, server crashes and network issues.

Most suitable for Banking applications and stock market.

**Sharding:** It means distributing the data load across multiple servers

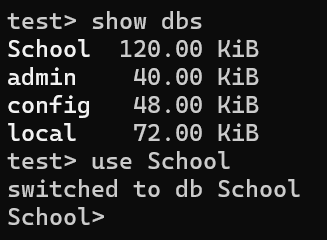
1. Ranged: - Splits data by value ranges
2. Hashed: - Uses hashing for even spread, ideal for random data.

**Task2: What is Authentication & Authorization?**

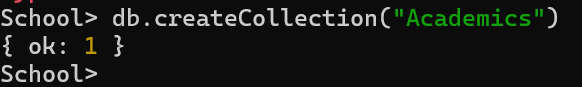
Authentication: It is about verifying the user means user id and user password

Authorization: It is about checking access for a specific task

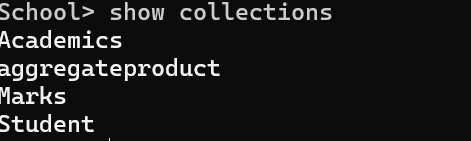
**Task3: Create a db**

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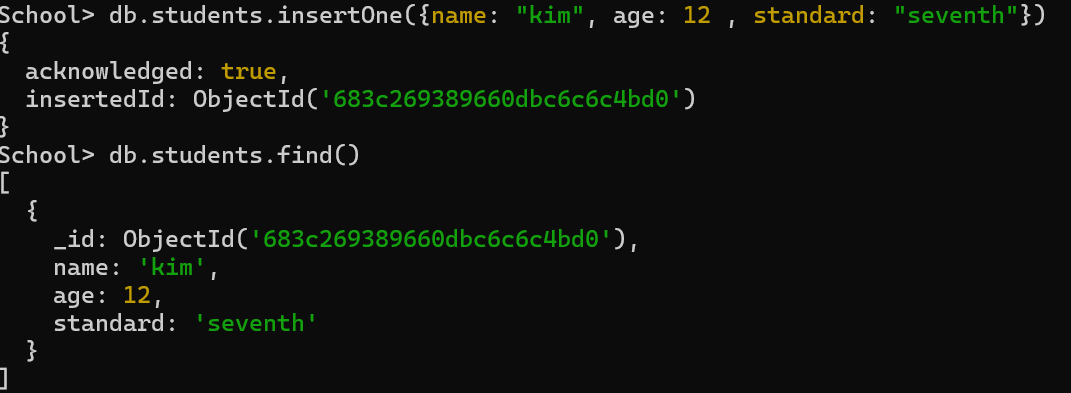
**Task4: Create a Collection**

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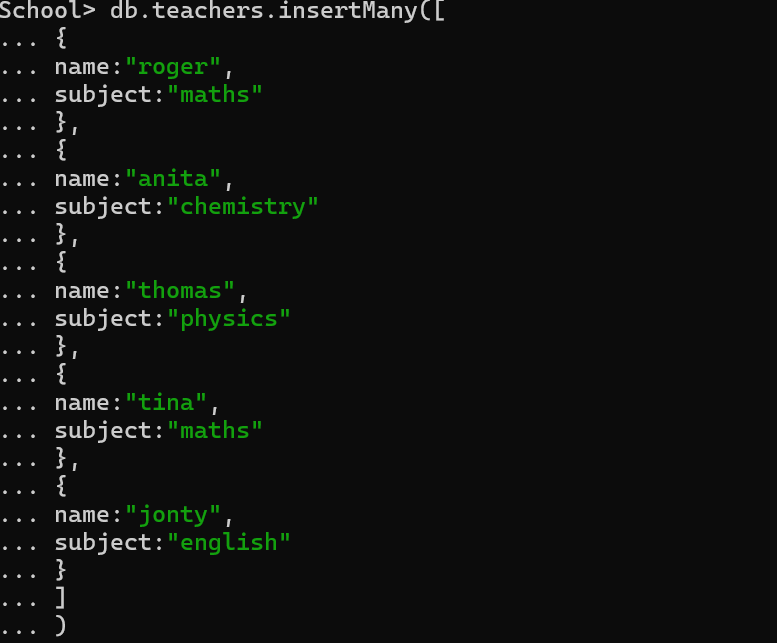
**Task5: Check collections**

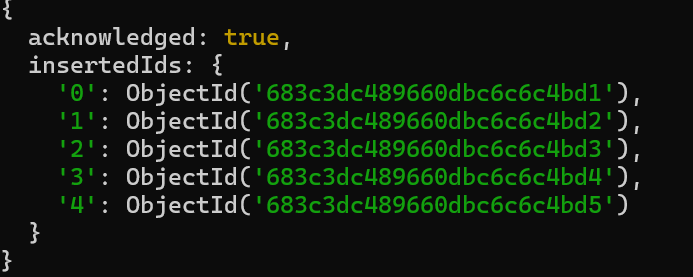
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**Task6: Insert into collection**

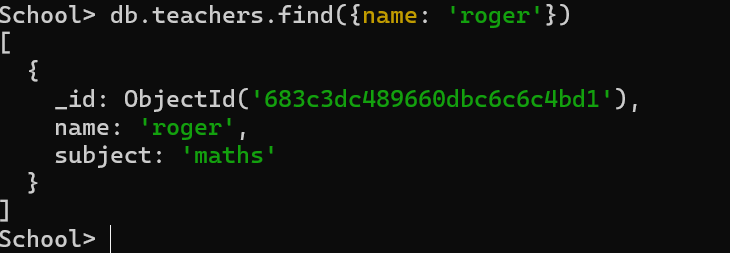
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**Task7: Insert multiple**

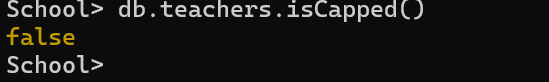
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**Task8: find a teacher with name roger**

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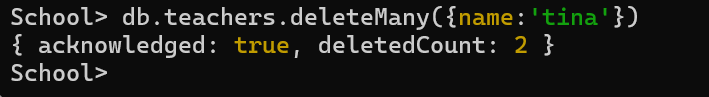
**Task9: Check if the collection is capped or not**

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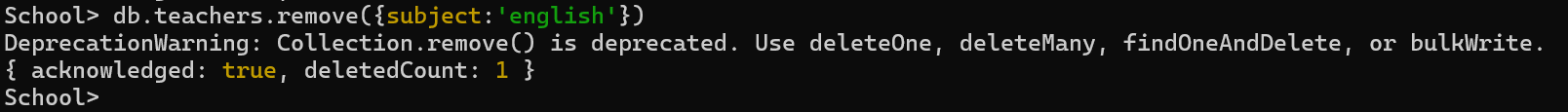
**Task10: Delete one**

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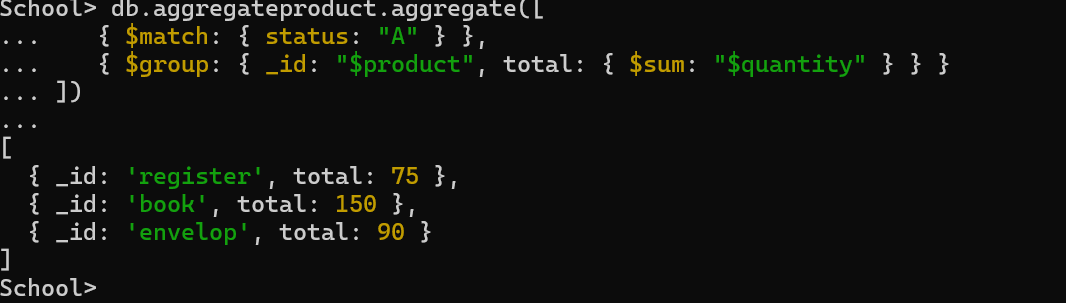
**Task11: Delete multiple documents**

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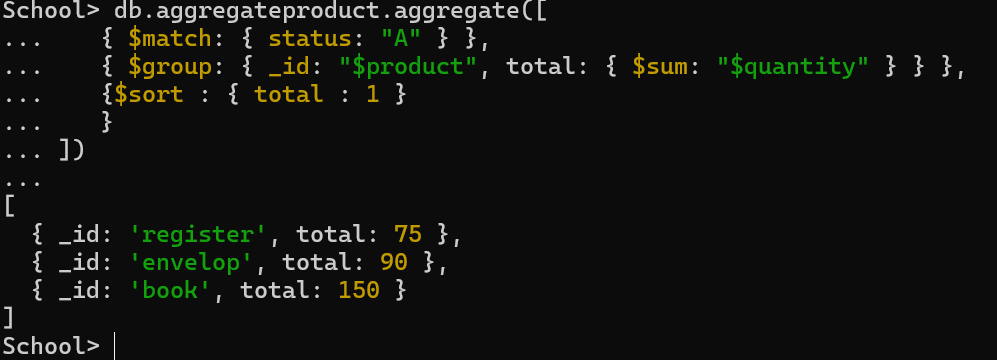
**Task12: Remove document**

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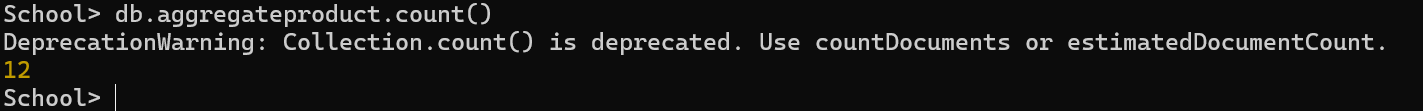
**Task13: Aggregate the data**

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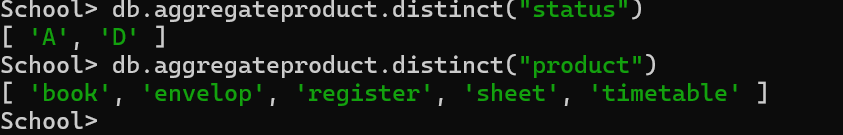
**Task14: Sort the documents**

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**Task15: Get the count of documents**

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**Task16: Find distinct field values**

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