Problems

1. Create a collection based on your assigned model (Shoes). This does not have to be demonstrated.

2. Disable the confirmation message that appears whenever you run one or more statements in Visual Studio Code.

3. Demonstrate a MongoDB command that lets you enter 6 documents into the collection at once. Include an Id for each document. For my audiobook collection I can save the audiobook title, the author, the duration in minutes to listen to the audiobook, the narrator, the publisher, and the date published. With the id, that is 7 key value pairs. Make sure to include number, character string, and date data types. Now demonstrate putting in a 7th document that includes an 8th key value pair not found in the other documents.

4. Show all the documents in your collection, and be prepared to do a search for one or more documents based on a search criteria supplied by your instructor and instructions to include only some of your key value pairs in the document.

5. Demonstrate how to remove a single document.

6. Put that one deleted document back in but do not include the id this time. Use two statements to do this, first store the document key value pairs in a variable and then use that variable in your statement to put back the document. Execute a search statement to return the one document without an ID.

7. Remove all your documents. When you put them all back in, include an embedded document in each of them. Use something different than the demonstrated embedded document that referred to an individual's name. (2 marks) or If you can't think of anything but the name example (1 mark).

8. Demonstrate a search that retrieves one or more documents based on what is stored in the embedded documents.

9. Update your collection so 5 of the documents use an array with three elements and one of your documents has no array and one document has a two-element array. Make sure you do not use generic names, find something that fits with the theme of your collection. (do this before your demonstration, it will become apparent during your demonstration).

10. Do a search based on the number of elements in your arrays. Return all the documents with three-element arrays and then all the documents with two-element arrays.

11. Demonstrate the use of $elemMatch with your arrays. Show different results similar to the ones in the PowerPoint presentation.

12. Demonstrate adding to the numeric key value pair you set up in the previous lab for a single document then reverse the result and add to the numeric key value pair for all the documents and then reverse the result.

13. Demonstrate the replaceOne function.

14. Demonstrate removing a key value pair in one of your documents. Then put it back in.

15. Put in a document in your collection without including an id. Then demonstrate how to search for the document with the object id and how to remove the document referring to the object id.

16. Insure your collection has documents that allow grouping by a key value pair. Have one group with three documents and one group with four documents at minimum. Show the number of documents in each group and include one other key value pair that you do something with.

17. You should already have a date key value pair in your documents in your collection. Do a date calculation for all your documents.

18. Demonstrate a conditional remove based on a value in a key value pair.

19. Demonstrate a sort of the documents in your collection. Be prepared to go in ascending or descending order.

20. Demonstrate adding an array element to a key value pair with $push. Show your array before, add the element and show your array after. Then use $addToSet to demonstrate adding the same element you added with $push.