II.   Show employees who live in an address which has a '–'sign.

III.   Show employees whose salary contains '150'.

IV.   Show employees whose age contains '2'.

V.   Update the salary with a 10% increase for all employees who have 'l' as the last character in the name.

Question 4 (MongoDB)

4.1 "This is a DBMS that is used to develop highly available and scalable internet applications. It has a horizontal scale-out architecture that uses a flexible schema for storing data. It is easy for developers to store structured or unstructured data".

One student has proposed that to meet the above requirement, the suitable database management system is 'MongoDB'. Justify this answer using 5 points.   (15 marks)

4.2 Use the following dataset to answer the questions.

[{ "_id" : 1, "title" : "Unlocking Android", "isbn" : "1933988673", "pageCount" : 416, "Price" : 5000},

{ "_id" : 2, "title" : "Android in Action, Second Edition", "isbn" : "1935182722", "pageCount" : 592, "Price" : 2800.50},

{ "_id" : 3, "title" : "Specification by Example", "isbn" : "1617290084", "pageCount" : 0, "author" : "Gojko Adzic" },

{ "_id" : 4, "title" : "Flex 3 in Action", "isbn" : "1933988746", "pageCount" : 576, "Price" : 8000},

{ "_id" : 14, "title" : "Coffeehouse", "isbn" : "1884777384", "pageCount" : 316, "Price" : 4000}]

Write MongoDB shell commands to perform the following tasks.

I.   Create a collection called 'Book'. (2 marks)

II.   Add two objects in the above list to 'Book' collection at once. (2 marks)

III.   Find all the objects which have more than 500 pages. (2 marks)

IV.   Find all the objects which have more than 500 pages and price is less than 5000. (2 marks)

V.   Update the price of the "Flex 3 in Action" book to 8500. (2 marks)