Task:

You have to provide appropriate SQL for the following questions using the HR database (as practiced in lab):

1. The HR department has requested a report of all employees and their job IDs. Display the last name concatenated with the job ID (separated by a comma and space) and name the column Employee and Title.
2. The HR department needs to find high-salary and low-salary employees. Display the last name and salary for any employee whose salary is not in the range of $5,000 to $12,000. Label the columns Employee and Monthly Salary, respectively
3. Display all employee last names in which the third letter of the name is "a".
4. Display the last names of all employees who have both an "a" and an "e" in their last name.
5. Display the last name, job, and salary for all employees whose jobs are either those of a sales representative or of a stock clerk, and whose salaries are not equal to $2,500, $3,500, or $7,000.
6. The HR department needs a report to display the employee number, last name, salary, salary increased by 15.5% (expressed as a whole number, and labeled as "New Salary"), and a column for the difference between the new and old salaries (label this column as "Increase") for each employee.
7. Write a query that displays the last name (with the first letter in uppercase and all the other letters in lowercase) and the length of the last name for all employees whose name starts with the letters "J", "A", or "M". Give each column an appropriate label. Sort the results by the employees last names.
8. The HR department wants to find the duration of employment for each employee. For each employee, display the last name and calculate the number of months between today and the date on which the employee was hired. Label the column as MONTHS_WORKED. Order your results by the number of months employed. Round the number of months up to the closest whole number.
9. Create a query to display the last name and salary for all employees. Format the salary to be 15 characters long, left-padded with the $ symbol. Label the column as SALARY.
10. Create a query that displays the first eight characters of the employees last names and indicates the amounts of their salaries with asterisks. Each asterisk signifies a thousand dollars. Sort the data in descending order of salary. Label the column as EMPLOYEES_AND_THEIR_SALARIES.
11. Display each employees last name, hire date, and salary review date, which is the first Monday after six months of service. Label the column REVIEW. Format the dates to appear in the format similar to "Monday, the Thirty-First of July, 2000".
12. Using the CASE function, write a query that displays the grade of all employees based on the value of the column JOB_ID, using the following data:

Job	***Grade***
AD_PRES	A

ST_MAN	B
IT_PROG	C
SA_REP	D
ST_CLERK	E
None of the above	0

13. Write a query to display the number of people with the same job.
14. Find the difference between the highest and lowest salaries per department. Label the column DIFFERENCE.
15. Create a query to display the job, the average salary for that job based on department number, and the total salary for that job, for departments 20, 50, 80, and 90, giving each column an appropriate heading.