UNIX and SQL

1. How would you use awk to print only the last column of every line in a file, prepended by line numbers?
2. How do you recursively copy all files from one directory to another while preserving permissions and timestamps?
3. How can you delete the first and last line of a file using sed?
4. Using cut, extract the 2nd and 5th columns of a colon-delimited file.
5. How would you find and list all symbolic links in a specific directory recursively?
6. Write a command using grep to find all lines that contain "error" regardless of case and show their line numbers.
7. How would you sort a file, remove duplicate lines, and redirect the result to a new file?
8. Use find to locate all 0-byte files in the current directory and delete them.
9. Write a command to change all occurrences of "foo" to "bar" in a file using sed.
10. How can you move files modified more than 7 days ago to an archive directory?
11. Use awk to print lines 3 to 5 of a file.
12. How would you use sort to arrange lines in a file based on the 3rd column?
13. Combine grep and awk to print lines where the last word is "success".
14. Write a sed command to show only the second line of a file.
15. Use awk to print the first and last word of every line in a file.
16. Using cp, copy a file while preserving its timestamp and mode.
17. How would you use cut to extract the first 5 characters of every line?
18. Using grep, list all empty lines in a file along with their line numbers.
19. Use find to search for all .log files larger than 10MB.
20. How would you rename a directory and then return to the original directory using cd -?
21. Show how to use chown to change the owner of a file recursively to user "admin".
22. Demonstrate using chmod to assign rwx to the owner and read-only to others.
23. Write a pipeline to show unique sorted 5-letter words from a file.
24. Use awk to print only those lines where the 3rd field is greater than 100.
25. How would you delete the 1st and 10th lines from a file using sed?
26. What command prints all file names in a directory that contain the word "backup"?
27. How can you use cat, sort, and uniq together to find the most common line in a file?
28. Write a one-liner to append the current date to the end of a file.
29. Use grep to find lines that begin and end with the same character.
30. How would you recursively search for a word in all files in a directory (case-insensitive)?
31. Use awk to sum up all values in the 2nd column of a file.
32. Using cut, show only the username from /etc/passwd.
33. Use find and chmod to make all shell scripts executable.
34. How would you overwrite a file using cat and then restore its original content?
35. Show the difference between cat > and cat >> using an example.
36. Write a script using awk to extract even-numbered lines from a file.
37. Use sed to replace the second occurrence of a word in each line.
38. Using grep, how can you find lines with exactly three words?
39. How can you use sort -u to get unique, sorted email addresses from a file?
40. What find command lists only directories modified within the last 2 days?
41. Use cut and awk together to print the length of each line in a file.
42. How would you transfer all .txt files from one directory to another using mv?
43. How to use awk to count how many lines contain more than 5 words?
44. Write a one-liner to backup a directory and compress it.
45. How do you combine cut, sort, and uniq to find the most frequent IP in a log?
46. Show how to change permissions for all .sh files to 755 using find.
47. Use grep -v to remove lines containing "debug" from a log file.

48.What command counts non-empty lines in a file?
49.Write a command to extract the third word of the last line using awk.
50.How can you find the size of the largest file in a directory?

DDL (CREATE, ALTER, DROP, TRUNCATE, RENAME)

1.Write a SQL statement to create a table employee with columns: id, name, salary.
2.ow would you add a new column dob (DATE) to an existing employee table?
3.Write SQL to remove a column dob from employee.
4.Change the precision of salary in employee to NUMBER(10,2).
5.How would you rename the column salary to emp_salary?
6.Rename the table employee to staff.
7.How do you delete all rows in a table without logging using SQL?
8.Write SQL to permanently remove a table from the database.
9.Create a table from another table's structure and data.
10.Create a table from another table's structure only (no data).

DML (INSERT, UPDATE, DELETE, MERGE)
11. Insert a new row into student with values (1, 'Alice', 85).
12. Insert using user input (substitution variables).
13. Insert into specific columns only.
14. Update a student's marks to 90 where name = 'Alice'.
15. Update multiple columns in one query.
16. Delete all records from student.
17. Delete students with marks below 50.
18. Use MERGE to synchronize data between two tables.
19. Use MERGE with WHEN MATCHED and WHEN NOT MATCHED.
20. Insert multiple rows using INSERT ALL.

SELECT and WHERE
21. Select all columns from student.
22. Select only name and marks.
23. Select students where marks > 80.
24. Select where name starts with 'A'.
25. Select where name ends with 'h'.
26. Select where marks BETWEEN 70 AND 90.
27. Select where name IS NULL.
28. Select where name IS NOT NULL.
29. Select using IN clause with names 'Alice', 'Bob'.
30. Select using NOT IN clause.

Logical Operators
31. Select students with marks > 80 AND name LIKE 'A%'.
32. Use OR to find students with marks < 60 OR name = 'John'.
33. Use NOT to exclude students with marks = 100.

ORDER BY
34. Order students by marks descending.
35. Order students by name ascending.
36. Order by multiple columns (marks DESC, name ASC).

Functions – Numeric
37. Select ABS(-5), MOD(7, 3).
38. Use NVL to replace NULL marks with 0.
39. Use POWER to calculate 2^3.
40. Calculate square root of marks using SQRT.
41. Round salary to 2 decimal places.

42. Truncate salary to integer.
43. Use CEIL and FLOOR functions.

Functions – String
44. Convert name to UPPER and LOWER.
45. Use LENGTH to get name length.
46. RPAD name with '*' to length 10.
47. LPAD salary with 0s to 5 digits.
48. LTRIM and RTRIM spaces.
49. TRIM unwanted characters.
50. Translate 'abc' to 'xyz'.
51. Replace 'John' with 'Johnny'.
52. Use CONCAT or || to join first name and last name.
53. Get ASCII value of first letter.
54. Get character using CHR(65).
55. Substring second to fourth character from name.
56. INSTR to find position of 'a' in name.
57. Use DECODE to assign grades based on marks.
58. Use GREATEST and LEAST for name strings.
59. Use COALESCE to get first non-null phone number.

Functions – Date
60. Get current date using SYSDATE.
61. Format date using TO_CHAR with 'DD-MM-YYYY'.
62. Convert string to date using TO_DATE.
63. Add 3 months to current date.
64. Find months between two dates.
65. Find next Monday after current date.
66. Get last day of current month.
67. Extract year from current date.
68. Use GREATEST and LEAST with dates.
69. Round date to nearest month.
70. Truncate date to start of month.

Group Functions (Basic)
71. Count number of students.
72. Get average marks.
73. Get sum of all marks.
74. Find minimum and maximum marks.
75. Group students by grade and get average.
76. Count students with distinct names.
77. Use HAVING with GROUP BY to filter average marks.
78. Combine GROUP BY and ORDER BY.

Advanced SELECT
79. Use column aliasing (SELECT marks AS score).
80. Use table aliasing in joins.
81. Select top 5 highest scoring students using ROWNUM.
82. Select all students except the top scorer.
83. Select students where name has exactly 5 characters.
84. Use LIKE to find names containing two 'a's.
85. Use wildcard match with underscore.
86. Use nested SELECT to find students with highest marks.
87. Use SELECT inside INSERT.
88. Use SELECT inside CREATE TABLE.
89. Select students with marks > average marks.

Permissions and Control
90. Grant SELECT and INSERT on student to user test.
91. Revoke INSERT privilege.
92. Grant ALL on student with GRANT OPTION.
93. Revoke all privileges.
94. Explain implicit vs. explicit COMMIT.
95. Demonstrate ROLLBACK to last SAVEPOINT.
96. Use SAVEPOINT to partially rollback a transaction.

Miscellaneous
97. Use CASE WHEN for conditional values (instead of DECODE).
98. Demonstrate inserting using SELECT from another table.
99. Explain the difference between DELETE and TRUNCATE.
100. Explain behavior of DROP vs. TRUNCATE with COMMIT.

Functional Questions
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1. SBA and explain with its related table and column names?
2. CCA and explain with its related table and column names?
3. CAA and explain with its related table and column names?
4. OFFICE ACCOUNT CREATION
5. How will you check whether an account is active or dormant mode?
6. How will you find whether a cif id is retail or Corporate?
7. How will you find whether an account is office acct or Operative account?
8. How will you find whether an account Lien marking or not and what are table involved
9. Different between Saving acct and current acct?
10.Scheme code creation Menu's and explain with its related table and column names?
11.How to link the Customer id in Fincore and table Details
12.Write any 5 CRM Tables in Finacle?
13. What are the Types and Sub Types of Transactions?
14. What are the Type of Lien? Can we mark lien multiple times for an account?
15. What are the Type of Freeze? Can we mark freeze multiple times for an account?
16. If the cif is suspend/blacklist can we open the account? If Yes/No please explain the reason.
17. How will you find the cif status (active/inactive)?
18. What are the parameters maintained in cross currency Transaction?