

## Unix Command Questions

1. What is the difference between `cat > filename` and `cat >> filename`?
2. How do you view a file with line numbers while ignoring blank lines?
3. What is the command to return to the previous working directory?
4. How can you copy a file and preserve its timestamp?
5. Which command recursively copies an entire directory?
6. Explain the use of `awk '{print NR, $5}' filename`.
7. How would you print only the 1st and last word of each line using `awk`?
8. Describe how `cut -d " " -f1,6 filename` works.
9. What is the output of `sed '1,10d' filename`?
10. How can you show only the 9th line of a file using `sed`?
11. What does `grep -nw 'saw' filename` do?
12. How do you find all empty files inside a directory using `find`?
13. What's the difference between `chmod 755` and `chmod 644`?
14. How can you replace all instances of "vani" with "rani" in a file using `sed`?
15. What is the purpose of `grep -i ^g filename`?
16. How would you print only lines 4 and 5 using `awk`?
17. Describe the function of `awk 'NR==5 {print $3}' filename`.
18. How can you delete only the first and the last line of a file using `sed`?
19. What is the purpose of `find /path -size 0b`?
20. What does the command `chown user file` do?

## SQL Questions:

### DDL / DML / TCL / DCL (15 questions)

1. What is the difference between `CREATE TABLE` and `ALTER TABLE`?
2. Write the syntax for inserting values into a specific set of columns.
3. How would you update all rows in a table to set a column to a fixed value?
4. What happens if you run `DELETE FROM table_name;` without a `WHERE` clause?
5. What is the effect of the `TRUNCATE` command?
6. How do you rename a table in SQL?
7. What is the purpose of the `COMMIT` command?
8. How is `ROLLBACK TO SAVEPOINT` used?
9. What are the types of privileges that can be granted using `GRANT`?
10. How do you revoke specific privileges from a user?
11. What is the difference between `DROP` and `TRUNCATE`?
12. What is the purpose of the `MERGE` statement?
13. What is a multi-table insert in SQL?
14. How do you insert multiple rows using `INSERT ALL`?
15. What is the purpose of the `WITH GRANT OPTION`?

### SELECT & CONDITIONS (15 questions)

16. Write a query to fetch all records from a table.

17. How do you fetch only specified columns from a table?
18. How is the WHERE clause used in filtering data?
19. Give an example of using AND and OR in a WHERE clause.
20. What does the BETWEEN operator do?
21. What is the use of IN and NOT IN?
22. How do you filter rows that have NULL values?
23. Write a query using LIKE to get names starting with 'S'.
24. Write a query using LIKE to get names ending in 'h'.
25. What does ORDER BY column DESC do?
26. What is the default sorting order in SQL?
27. How would you sort data based on two columns?
28. What is the significance of aliases in SQL?
29. What is the purpose of table aliases?
30. How do you select data from one table and insert into another?

#### Numeric Functions (10 questions)

31. What does the ABS() function do?
32. How do you get the square root of a number?
33. What is the result of MOD(7,4)?
34. How is NVL() used to handle null values?
35. What is the output of POWER(2,3)?
36. Describe the usage of CEIL() and FLOOR() functions.
37. How do ROUND() and TRUNC() differ in behavior?
38. What is the purpose of BITAND() function?
39. How do GREATEST() and LEAST() work with numbers?
40. What does the COALESCE() function return?

#### String Functions (15 questions)

41. How do you convert a string to uppercase?
42. What does INITCAP('hello') return?
43. How do you get the length of a string?
44. What is the difference between RPAD() and LPAD()?
45. Write a query to trim characters from the left of a string.
46. Write a query to trim characters from both ends of a string.
47. How does TRANSLATE() differ from REPLACE()?
48. What is the use of SOUNDEX()?
49. How do you concatenate two strings using the || operator?
50. What does ASCII('A') return?
51. How does CHR(97) behave?
52. Write a query to extract a substring using SUBSTR().
53. How does INSTR() function work?
54. What is the use of DECODE() function?
55. How does COALESCE() help in handling NULLs?

#### Date Functions (15 questions)

56. What is the output of SYSDATE?
57. How do SYSDATE and CURRENT\_DATE differ?
58. Write a query to get the current timestamp.
59. What is the use of SYSTIMESTAMP?
60. How do you get the last day of the month?
61. What is the difference between ADD\_MONTHS() and MONTHS\_BETWEEN()?
62. How do you convert a string to a date using TO\_DATE()?
63. How do you extract the year from a date?
64. Write a query to display current date in format DD MONTH YYYY.
65. What is the use of NEXT\_DAY()?
66. How do you format a date using TO\_CHAR()?
67. What does SESSIONTIMEZONE return?
68. What is the function of DBTIMEZONE? \
69. How does ROUND(date) differ from TRUNC(date)?
70. Write a query using NEW\_TIME().

#### Join/Advanced Concepts (10 questions)

71. What is the purpose of the MERGE statement?
72. How do you create a table using CREATE TABLE AS SELECT?
73. What does INSERT INTO table1 SELECT \* FROM table2 do?
74. How do you insert data into a table with different structure using MERGE?
75. What is the difference between ALL and FIRST in multi-insert? \
76. How do you use CASE or DECODE for conditional logic?
77. Write a query to insert a record using & substitution.
78. What is the use of the DUAL table?
79. Explain GREATEST() and LEAST() when used with strings.
80. What happens when you use NULL values in arithmetic expressions?
81. Difference between UNIQUE and PRIMARY KEY?
82. What is the different between SQL and PLSQL?
83. Type of single row function?
84. Explain the Group function?
85. explain the custom and what you did?
86. what is the different between custom function and product function?
87. Create an index on Author in the Books table.
88. Drop an index named idx\_books\_title.
89. What is the purpose of indexing?
90. Does index slow down INSERT operations?
91. Create a view ExpensiveBooks for books with price > 500.
92. Select all records from ExpensiveBooks.
93. Update a view if possible.
94. Drop a view ExpensiveBooks.
95. What is the difference between simple and complex views?

96. Create a sequence book\_seq starting at 100.
97. Use the sequence to insert a new book.
98. Change increment of book\_seq to 5.
99. Drop the sequence.
100. Get the next value of book\_seq.
101. Create a synonym emp for the Employees table.
102. Select data from the synonym.
103. Drop the synonym emp.
104. Why use synonyms?