ELITE SQL QUERIES FOR THE PRACTICE

Basic Select Statement

1. Display all the information of the EMP table?

2. Display unique Jobs from EMP table?

3. List the employees who joined before 1981.

4. List the employees who are working for the Deptno 10 or20.

5. List all the Clerks of Deptno 20.

6. Display the details of SMITH.

7. Display the location of SMITH.

8. List the employees whose salary is more than 3000 after giving 20% increment.

9. List the grade, EMP name for the deptno 10 or deptno 30 but salary grade is not 4 while they joined the company before '31-dec-82'.

10. List the employees those who joined in company before 15th of the month.

11. List the employees who are working as Managers.

12. List the Ename and Salary is increased by 15% and expressed as no.of Dollars.

13. Produce the output of EMP table 'EMP_AND_JOB' for Ename and Job.

14. Produce the following output from EMP.

    LOYEE

    SMITH (clerk)

    ALLEN (Salesman)

15. Display the unique department with jobs.

16. Display the details of the Blake.

17. List all the clerks.

18. List the empno, salary, commission of employees.

19. Display the unique department of the employees.

20. List all the employees joined on 1st may 81.

21. List the employees who are working as managers.

22. List the employees who are either clerks or managers.

23. List the employees who have joined on the following dates 1 may 81,17 Nov 81,30 Dec 81

24. List the employees who have joined in the year 1981.

25. List the employees whose annual salary ranging from 23000 to 40000.

26. List the employees working under the Managers 7369,7890,7654,7900.

27. List the employees who joined in the second half of 82.

28. Find out salary of both MILLER and SMITH.

29. Find out the names and salaries of all employees earning more than 1000 per One month.

30. Display the names and salaries of all employees except JAMES.

SQL Operators

31. Display all the details of the employees whose Comm. Is more than their Salary.

32. List the employees Who Annual salary ranging from 22000 and 45000.

33. List the employee's name, job that is without manager.

34. List the employee names starting with 'M'.

35. List the employees end with 'H'.

36. List the employees who joined in the year 81.

37. List the employees whose salary is ending with 00.

38. List the employee who joined in 80's.

39. List the employee who are clerks who have experience more than 8ys.

40. List the Managers of dept 10 or 20.

41. Find out the details of employees whose names begin with 'S'.

42. Find out the names of all employees that have 'A' anywhere in their name.

43. Find out the names of all employees that have 'L' as their third character in their name.

44. Find out the names of the employees whose name begin with 'A' or 'M'.

45. Select the name, job, salary, department number of all employees except

46. SALESMAN from department number 30.

47. List unique departments of the EMP table.

48. List the name and salary of employees who can earn more than 1500 and are in department 10 or 30. Label the columns Employee and Monthly Salary respectively.

49. List the name and salary for all employees whose salary is not in the range of 1500 and 2850.

50. Display the name and job of all employees who do not have a MANAGER.

51. Display the name, job, and salary of all the employees whose job is MANAGER or ANALYST and their salary is not equal to 1000, 3000, or 5000.

52. Display the name, salary and commission for all employees whose commission amount is greater than their salary increased by 10%

53. Display the name of all employees who have two Ls in their name and are in department 30 or their manager is 7782.

Single Row Functions and Order by

54. Compute yearly salary of SMITH.

55. Compute daily salary of JONES.

56. Calculate the total monthly salary of all employees.

57. Print the average annual salary.

58. List those Employees whose Salary is odd value.

59. List the employee's whose Salary contain 3 digits.

60. List the employees who joined in the month of DEC.

61. List the employees whose names contains 'A'.

62. List the employees whose Deptno is available in his Salary.

63. List the employees whose 10% of Salary is equal to year of joining.

64. List first 50% of chars of Ename in Lower Case and remaining are upper Case.

65. List the Enames who are retiring after 31-Dec-89 the max Job period is 20Y.

66. List the employees in the ascending order of their Salaries?

67. List the details of the employees in ascending order of the Department numbers and descending of Jobs?

68. Display all the unique job groups in the descending order?

69. List the Empno, Ename, Salary, Daily salary of all employees in the ascending order of Annual salary.

70. List the Empno, Ename, Salary and Experience of all employees working for Manager 7369.

71. List the employees in the ascending order of Designations of those joined after the second half of 1981.

72. List the employees along with their Experience and Daily Salary is more than Rs.100.

73. List the employees who are either 'CLERK' or 'ANALYST' in the Descending order.

74. List the employees who joined on 1-MAY-81,3-DEC-81,17-DEC-81,19-JAN-80 in ascending order of seniority.

75. List the employees who are joined in the year 81.

76. List the employees who are joined in the month of Aug 1980.

77. List the Enames those are having five characters in their Names.

78. List the Enames those are starting with 'S' and with five characters.

79. List the employees those are having four chars and third character must be 'r'.

80. List the Five character names starting with 'S' and ending with 'H'.

81. List the employees who joined in January.

82. List the employees who joined in the month of which second character is 'a'.

83. List the employees whose Salary is four digit number ending with Zero.

84. List the employees whose names having a character set 'LL' together.

85. List the employees those who joined in 80's.

86. List the employees who does not belong to Deptno 20. List all the employees except 'PRESIDENT' & 'MGR" in ascending order of Salaries.

87. List all the employees who joined before or after 1981. List the employees whose Empno not starting with digit78.

88. List the employees who joined in any year but not belongs to the month of March.

89. List the employees of Deptno 30 or 10 joined in the year 1981.

90. Find the highest salary of EMP table.

91. Find the total salary given to the MANAGER.

92. Find the total annual salary to distribute job wise in the year 81.

93. Display total salary employee belonging to grade 3.

94. Display the average salaries of all the clerks.

95. List the employees with Hire date in format June 4, 1988.

96. Print a list of emp's Listing 'just salary' if Salary is more than 1500, on target if Salary is 1500 and 'Below 1500' if Salary is less than 1500.

97. Write a query which return the day of the week for any date entered in format 'DD-MM-YY'.

98. Count the no. of characters without considering spaces for each name.

99. Find out how may Managers are their in the company.

100. List the employees who are drawing less than 1000 Sort the output by Salary.

101. List the details of the employees in the ascending order of the salary.

102. List the dept in the ascending order of the job and the descending order of the employees print empno, ename.

103. List the empno,ename,salary,deptno of the dept 10 employees in the ascending order of salary.

104. List the employees whose salaries are less than 3500.

105. List the empno, ename, salary of all the emp joined before 1 apr 81.

106. List the emp whose annual salary is <25000 in the ascending order of the salaries.

107. List the empno, ename, annual salary, daily salary of all the salesmen in the ascending annual salary.

108. List the empno, ename, hiredate, current date & experience in the ascending order of the experience.

109. List the employees whose experience is more than 10 years.

110. List the empno,ename,salary,TA30%,DA 40%,HRA 50%,GROSS,LIC,PF,net,deduction,net allow and net salary in the ascending order of the net salary.

111. List the employee who joined in the month of JAN.

112. Who joined in the month having char 'a'.

113. Who joined in the month having second char 'a'

114. List the employees joined in January with salary ranging from 1500 to 4000.

115. List the unique jobs of department 20 and 30 in descending order.

116. List the employees along with experience of those working under the Manager whose number is starting with 7 but should not have a 9 joined before 1983.

117. List the employees who are working as either Manager or analyst with the salary ranging from 2000 to 5000 and without comm.

118. Find out experience of MILLER.

119. How many different departments are there in the employee table.

120. Find out which employee either work in SALES or RESEARCH department.

121. Print the name and average salary of each department.

122. Select the minimum and maximum salary from employee table.

123. Select the minimum and maximum salaries from each department in employee table.

124. Select the details of employees whose salary is below 1000 and job is CLERK.

Group by and Having

125. Display the number of employee for each job group deptno wise.

126. List the manager no and the number of employees working for those managers in the ascending.

127. Display the Grade, Number of employees, and max salary of each grade.

128. Display dname, grade, No. of employees where at least two employees are clerks.

129. List the names of the employees who are getting the highest salary dept wise.

130. List the no. of employees in each department where the no. is more than 3.

131. List the names of depts. Where at least 3 are working in that department.

132. Find Average salary and Average total remuneration for each Job type

133. Find all the employees who earn the minimum Salary for each job wise in ascending order.

134. Find out all the employees who earn highest salary in each job type. Sort in descending salary order.

135. Find out the most recently hired employees in each Dept order by Hiredate.

136. List the employee name, Salary and Deptno for each employee who earns a salary greater than the average for their department order by Deptno.

137. List the Deptno where there are no employees.

138. List the No. of emp's and Avg salary within each department for each job.

139. Find the maximum average salary drawn for each job except for 'President'.

Sub Queries and Co related Sub queries

140. Display all the details of all 'Managers'

141. Display the Empno, Ename, job, Hiredate, Experience of all Managers.

142. List all the Grade2 and Grade 3 employees. Display all Grade 4, 5 Analyst and Manager.

143. List all the information of emp with Location and the Grade of all the employees belong to the Grade range from 2 to 4 working at the Dept those are not starting with char set 'OP' and not ending with 'S' with the designation having a char 'a' any

where joined in the year 1981 but not in the month of Mar or Sep and Salary not end with '00' in the ascending order of Grades

144. List the details of the employees whose Salaries more than the employee BLAKE.

145. List the employees whose Jobs are same as ALLEN.

146. List the emps who are senior to King.

147. List the Employees of Deptno 20 whose Jobs are same as Deptno10.

148. List the Employees whose Salary is same as FORD or SMITH in descending order of Salary.

149. List the employees Whose Jobs are same as MILLER or Salary is more than ALLEN.

150. List the Employees whose Salary is > the total remuneration of the SALESMAN.

151. List the employees who are senior to BLAKE working at CHICAGO & BOSTON.

152. List the Employees of Grade 3,4 belongs to the dept ACCOUNTING and RESEARCH whose Salary is more than ALLEN and experience more than SMITH in the ascending order of EXPERIENCE.

153. List the employees whose jobs same as SMITH or ALLEN.

154. Any jobs of deptno 10 those that are not found in deptno 20.

155. Find details of highest paid employee.

156. Find the highest paid employee of sales department.

157. List the most recently hired emp of grade3 belongs to location CHICAGO.

158. List the employees who are senior to most recently hired employee working under king.

159. List the details of the employee belongs to newyork with grade 3 to 5 except 'PRESIDENT' whose salary> the highest paid employee of Chicago in a group where there is manager and salesman not working under king.

160. List the details of the senior employee belongs to 1981.

161. List the employees who joined in 1981 with the job same as the most senior person of the year 1981.

162. List the most senior empl working under the king and grade is more than 3.

163. List the employee in dept 20 whose salary is >the average salary 0f dept 10 employees.

164. Display the employees whose manager name is jones.

165. List the employees who are not working in sales dept.

166. List the name, job, dname, location for those who are working as MANAGERS.

167. List the employees whose salary is equal to the average of max and minimum

168. List the managers whose salary is more than his employees average salary.

169. List the name, salary, comm. For those employees whose net pay is greater than or equal to any other employee salary of the company.

170. List the employee names and his average salary department wise.

171. Find out employees whose salaries greater than salaries of their managers.

172. List the managers who are not working under the president.

173. List the records from employee whose deptno is not in dept.

174. List the Name, Salary, Commission and Net Pay is more than any other employee.

175. List the Name of dept where highest no. of employees are working.

176. Count the No. of employees who are working as 'Managers'(using set option).

177. List the employees who joined in the company on the same date.

178. List the details of the employees whose Grade is equal to one tenth of Sales Dept.

179. List the name of the dept where more than average no. of employees are working.

180. List those Managers who are getting less than his employees Salary.

181. Print the details of all the employees who are sub-ordinates to Blake.

182. List the employees whose Manager name is 'Jones' and also with his Manager name.

183. Find out the Job that was filled in the first half of 1983 and same job that was filled during the same period of 1984.

184. Find out the employees who joined in the company before their Managers.

185. Find the name and Job of the employees who earn Max salary and Commission.

186. List the Name, Job and Salary of the employees who are not belonging to the department 10 but who have the same job and Salary as the employees of dept 10.

187. List the Deptno, Name, Job, Salary and Sal+Comm of the SALESMAN who are earning maximum salary and commission in descending order.

188. List the Deptno, Name, Job, Salary and Sal+Comm of the employees who earn the second highest earnings (sal + comm.).

189. List the Deptno and their average salaries for dept with the average salary less than the averages for all department

190. List out the Name, Job and Salary of the employees in the department with the highest average salary.

191. List the employees whose job is same as smith.

192. List the employees whose job is same as either Allen or salary>Allen.

193. List the employees who are senior to their own manager.

194. List the employees whose salary greater than Blake's salary.

195. List the dept 10 employees whose salary>Allen salary.

196. List the Managers who are senior to king and who are junior to smith.

197. List the employees whose salgrade are greater than the grade of miller.

198. List the employees who are belonging Dallas or Chicago with the grade same as Adams or experience more than smith.

199. List the employees whose salary is same as ford or Blake.

200. List the highest paid employee.

201. List the details of most recently hired employee of dept 30.

202. List the highest paid employee of Chicago joined before the most recently hired employee of grade2.

203. List the highest paid employee working under king.

204. Retrieve a list of MANAGERS.

205. List the employees who are working as Managers using co-related sub-query.

DDL /DML/TCL commands

206. Consider the relations given below:

     i. EMPLOYEE (EmployeeID, EmployeeName, Street, City)

     ii. COMPANY (CompanyID, CompanyName, City)

     iii. WORKS (EmployeeID, CompanyID, Salary)

     iv. MANAGES (EmployeeID, ManagerID)

  Create above relations using your own data types and print the structure of the each relation.

207. Insert at least 5 records in the relation EMPLOYEE and 5 records in the relation COMPANY.

208. Insert 5 appropriate records in the relations WORKS and MANAGES.

209. Add new column company_address in Company table

210. Rename column company_address to address

211. Modify the size of Salary column to number(8,2)

212. Print the contents of the each relation.

Joins

213. List the employees who are working under 'MGR' along with Manager name.

214. List the total information of EMP table along with DNAME and Location of all the employees Working Under 'ACCOUNTING' & 'RESEARCH' in the ascending Deptno.

215. List the Empno, Ename, Salary, Dname of all the 'MGRS' and 'ANALYST' working in New York, Dallas with an experience more than 7 years without receiving the Comm ascending order of Location.

216. Display the Empno, Ename, Salary, Dname, Location, Deptno, Job of all employees working at CJICAGO or working for ACCOUNTING dept with Annual Salary>28000, but the Salary should not be=3000 or 2800 who doesn't belongs to the Manager and whose no is

217. having a digit '7' or '8' in 3rd position in the ascending order of Deptno and descending order of job.

218. Display the total information of the employees along with Grades in the ascending order.

219. List the Empno, Ename, Salary, Dname, Grade, Experience, and Annual Salary of employees working for Dept10 or20.

220. List the details of the Depts along with Empno, Ename or without the employees

221. List the Employees who are senior to their own MANAGERS.

222. List the department details where at least two employees are working

223. List the employees with dept names.

224. List the employees name, dept, salary and comm. For those whose salary is between 2000 and 5000 while location is Chicago.

225. List the employees whose salary is greater than his managers salary

226. List the employees whose Manager name is jones and also list their manager name.

227. List the name and salary of ford if his salary is equal to high salary of his grade.

228. List the name, job, dname ,salary, grade dept wise

229. List the emp name, job, salary, grade and dname except clerks and sort on the basis of highest salary.

230. List the employee Name, Job, Annual Salary, deptno, Dept name and grade who earn 36000 a year or who are not CLERKS.

231. List all the employees by name and number along with their Manager's name and number. Also List KING who has no 'Manager'.

232. List out the Names and Salaries of the employees along with their manager names and salaries for those employees who earn more salary than their Manager.

233. List the empno, ename, deptno, location of all the employees.

234. List the empno, ename, location, dname of all the depts.10 and 20.

235. List the empno, ename, salary, location of the employees working at Chicago dallas with an experience>6ys.

236. List the employees along with location of those who belongs to dallas ,newyork with salary ranging from 2000 to 5000 joined in 81.

237. List the empno, ename, salary, grade of all employees.

238. List the details of the employees working at Chicago.

239. List the grade 2 and 3 emp of Chicago.

240. List the employees with location and grade of accounting dept or the location Dallas or Chicago with the grades 3 to 5 &experience >6 year

241. List the grades 3 employees of research and operations depts joined after 1987 and whose names should not be either miller or Allen.

242. List the empno, ename, location, salary, dname, location of the all the employees belonging to king dept.

Sequences

243. Create sequence start with 1 ending with 1000 and restarted again from 1 once it reaches to 1000

244. Create sequence start with 1000 ending with 9999 and cannot be restarted again.

View and Indexes

245. Find out least 5 earners of the company.

246. List the employee whose salary<his manager but more than any other manager.

247. Create an index on ename column of emp table

Use the following Schema to perform the given set of assignment.

Tables-

Member – It contains information about the members.

Column Name	Data Type	Description
Member_Id	Number(5)	Unique Member ID
Member_Name	Varchar2(30)	Name of the Library member
Member_address	Varchar2(50)	Address of the member
Acc_Open_Date	Date	Date of membership
Membership_type	Varchar2(20)	Type of the membership such as 'Lifetime',' Annual', 'Half Yearly',' Quarterly'
Fees_paid	Number(4)	Membership fees paid
Max_Books_Allowed	Number(2)	Total Number of books that can be issued to the member.
Penalty_Amount	Number(7,2)	Penalty amount due

Books- It contains information about the books belongs to the library.

Column Name	Data Type	Description
Book_No	Number(6)	Book identification

		number
Book_Name	VarChar2(30)	Name of the book
Author_name	Varchar2(30)	Author of the book
Cost	Number(7,2)	Cost of the book
Category	Char(10)	Category like Science , Fiction etc.

Issue – It contains the information about issue of the books.

Column Name	Data Type	Description
Lib_Issue_Id	Number(10)	Library Book Issue No
Book_No	Number(6)	Number of the book issued
Member_Id	Number(5)	Member that issued the book
Issue_Date	Date	Date of Issue
Return_date	Date	Return date

248. Create the table Member, Books and Issue without any constraints as mentioned in the schema description above.
249. View the structure of the tables.
250. Drop the Member table.
251. Create the table Member again as per the schema description with the following constraints.
    i. Member_Id – Primary Key
    ii. Membership_type - 'Lifetime',' Annual', 'Half Yearly',' Quarterly'
252. Modify the table Member increase the width of the member name to 30 characters.
253. Add a column named as Reference of Char(30) to Issue table.
254. Delete/Drop the column Reference from Issue.
255. Rename the table Issue to Lib_Issue.
256. Insert following data in table Member

Member ID	Member Name	Member Address	Acc_Open_Date	Membership_type	Fees_Paid	Max_Books _Allowed	Penalty_ Amount
1	Richa Sharma	Pune	10-Dec-12	Lifetime	9500	5	50
2	Garima Sen	Pune	current date	Annual	1000	3	Null

257. Insert at least 5 records with suitable data and save it.
258. Modify the column **Member_name**. Decrease the width of the member name to 20 characters. (If it does not allow state the reason for that)
259. Try to insert a record with Max_Books_Allowed = 110, Observe   the error that comes. Report the reason for this error.
260. Generate another table named **Member101** using a Create command along with a simple SQL query on member table.
261. Add the constraints on columns max_books_allowed and penalty_amt as follows
    i. max_books_allowed < 100
    ii. penalty_amt maximum 1000
262. Also give names to the constraints.

263. Drop the table books.
264. Create table Books again as per the schema description with the following constraints.
265. Book_No – Primary Key
266. Book_Name – Not Null
267. Category – Science, Fiction, Database, RDBMS, Others.
268. Insert data in Book table as follows:

Book_No	Book Name	Author	Cost	Category
101	Let us C	Denis Ritchie	450	System
102	Oracle – Complete Ref	Loni	550	Database
103	Mastering SQL	Loni	250	Database

104	PL SQL-Ref	Scott Urman	750	Database

269. Insert more records in Book table using & operator in the insert statement.
270. Create table Book101 similar to Book in structure with no data in it.
271. Insert into Book101 all the data in Book table using Select Statement.
272. Save all the data so far inserted in the tables.
273. View the data in the tables using simple SQL query.
274. Insert into Book following data.
    i. 105, National Geographic, Adis Scott, 1000, Science

275. Undo the last changes.
276. Modify the price of book with id 103 to Rs 300 and category to RDBMS.
277. Rename the table Lib_Issue to Issue.
278. Drop table Issue.
279. As per the given structure Create table Issue again with following constraints.
    ii. Lib_Issue_Id-Primary key
    iii. Book_No- foreign key
    iv. Member_id - foreign key
280. Insert following data into Issue table. Note leave the column Return_Date as null.

Lib_Issue _Id	Book No	Member ID	Issue Date	Return Date
7001	101	1	10-Dec-12	
7002	102	2	25-Dec-12	
7003	104	1	15-Jan-12	
7004	101	1	04-Jul-12	
7005	104	2	15-Nov-12	
7006	101	3	18-Feb-12	

281. Save the data.
282. Disable the constraints on Issue table
283. Insert a record in Issue table. The member_id should not exist in member table.
284. Now enable the constraints of Issue table. Observe the error.
285. Delete the record inserted at Q-32) and enable the constraints.

286. Try to delete the record of member id 1 from member table and observe the error .
287. Modify the Return_Date of 7004, 7005 to 15 days after the Issue_date.
288. Modify the Penalty_Amount for Garima Sen to Rs 100.
289. Perform a save point X here.
290. Remove all the records from Issue table where member_ID is 1 and Issue date in before 10-Dec-06.
291. Remove all the records from Book table with category other than RDBMS and Database.
292. Undo the changes done after savepoint X.
293. Save all the changes done before X.
294. Remove the table Member101.
295. Remove the table Book101.
296. View the data and structure of all the three tables Member, Issue, Book.
297. List all the books that are written by Author Loni and has price less than 600.
298. List the Issue details for the books that are not returned yet.
299. Update all the blank return_date with 31-Dec-12 excluding 7005 and 7006.
300. List all the Issue details that have books issued for more then 30 days.
301. List all the books that have price in range of 500 to 750 and has category as Database.
302. List all the books that belong to any one of the following categories Science, Database, Fiction, Management.
303. List all the members in the descending order of Penalty due on them.
304. List all the books in ascending order of category and descending order of price.
305. List all the books that contain word SQL in the name of the book.
306. List all the members whose name starts with R or G and contains letter I in it.
307. List the entire book name in Init cap and author in upper case in the descending order of the book name.
308. List the Issue Details for all the books issue by member 101
    a. with Issue_date and Return Date in following format. **'Monday, July, 10, 2012'.**

309. List all the members that became the member in the year 2012.
310. List the Lib_Issue_Id, Issue_Date, Return_Date and No of days Book was issued.
311. Find the details of the member of the Library in the order of their joining the library.
312. Display the count of total no of books issued to Member 101.
313. Display the total penalty due for all the members.
314. Display the total no of members.
315. Display the total no of books issued.
316. Display the average membership fees paid by all the members.
317. Display no of months between issue date and return date for all issue

318. List the various categories and count of books in each category.
319. List the book_No and the number of times the book is issued in the descending order of count.
320. Find the maximum, minimum, total and average penalty amount in the member table.
321. Display the member id and the no of books for each member that has issued more then 2 books.
322. Display the member id, book no and no of times the same book is issued by the member in the descending order of count.
323. Display the month and no of books issued each month in the descending order of count.
324. List the book_no of all the books that are not issued to any member so far.
325. List all the member id that exist in member table and has also at least one book issued by them.
326. List the member ID with lowest no of books issued.
327. List all the Issue_details for books issued in December and July without using any arithmetic, Logical or comparison operator.
328. List the Book_No, Book_Name and Issue_date for all the books that are issued in month of December and belong to category Database.
329. List the Member Id, Member Name and No of books Issued in the descending order of the count.
330. List the Book No, Book Name, Issue_date and Return_Date for all the books issued by Richa Sharma.
331. List the details of all the members that have issued books in Database category.
332. List all the Issue_Details where Issue_date is not within the Acc_open_date and Return_date for that member.
333. List all the members that have not issued a single book so far.
334. List all the members that have issued the same book as issued by Garima.
335. List the Book_Name, Price of all the books that are not returned for more then 30 days.
336. List all the authors and book_name that has more then 1 book written by them.
337. List the Member ID, Member Name of the people that have issued the highest no of books.
338. List the total cost of all the books that are currently issued but not returned.
339. List the details of the book that has been issued maximum no of times.
340. List how many books are issued to lifetime members.
341. List all the members who has issued books from author "Loni" in the month of December
342. Create a Read Only view to display Lib_Issue_Id, Book_Name, Member_Name, Author and Issue_date for all the books that have price between 500 – 750 and category as Database or RDBMS.

343. Create a simple view which should display Author_Name and total number of books written by him.