Let’sBeginLearningSQL.

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SQLwithsampleDDLandDMLcommands(MYSQL8.X)

ToimproveSQLskills,onewayistoinstallaSQLpackagelike MySQL and start practicing with it. To give you all apositive push, I’ve outlined a few SQL query questions inthismaterial.

I have selected a set of 30 SQL queries that you can use tostep up you’re learning. I also given SQL scripts to createthetestdata.So,youcanusethemtocreateatestdatabase andtables.

IhavebeencoveringmostoftheSQLqueryquestions.

PrepareSampleDatatoPracticeSQLSkill.

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SampleTable→Employee

EMPLOYEE_IDFIRST_NAMELAST_NAMESALARYJOINING_DATEDEPARTMENT

001MonikaArora100000 2014–02–20 09:00:00HR
002NiharikaVerma800002014–06–11 09:00:00Admin
003VishalSinghal300000 2014–02–20 09:00:00HR
004AmitabhSingh500000 2014–02–20 09:00:00Admin
005VivekBhati500000 2014–06–11 09:00:00Admin
006VipulDiwan200000 2014–06–11 09:00:00Account

007SatishKumar750002014–01–2009:00:00Account
008GeetikaChauhan900002014–04–
1109:00:00AdminSampleTable →Bonus
EMPLOYEE_REF_IDBONUS_DATEBONUS_AMOUNT
12016–02–2000:00:005000
22016–06–1100:00:003000
32016–02–2000:00:004000
12016–02–2000:00:004500
22016–06–1100:00:003500
Sample Table
→TitleEMPLOYEE_REF_ID
EMPLOYEE_TITLEAFFECTED_FROM
1Manager2016–02–2000:00:00
2Executive2016–06–1100:00:00
8Executive2016–06–1100:00:00
5Manager2016–06–1100:00:00
4Asst.Manager2016–06–1100:00:00
7Executive2016–06–1100:00:00
6Lead2016–06–1100:00:00
3Lead2016–06–1100:00:00

To prepare the sample data, you can run the followingqueries in your database query executor or on the SQLcommandline.I'vetestedthemwithMySQLServer5.7.

SQLScripttoSeedSampleData.
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CREATE DATABASE ORG;SHOWDATABASES;
USEORG;

OnceaboveSQLwouldrun,you'llseearesultsimilartotheone attachedbelow.

Q-1.WriteanSQLquerytofetch"FIRST_NAME"from Employeetableusingthealiasnameas <EMPLOYEE_NAME>.
Ans. ***select First_Name as Employee_name from Employee;***

Q-2.*WriteanSQLquerytofetch“FIRST_NAME”from* EMPLOYEEtableinuppercase.A
ns. *Select*
upper(“First_Name”) from
Employee ;

Q-
3.WriteanSQLquerytofetchuniquevaluesofDEPARTMENTf
romEMPLOYEEtable.
Ans. Select distinct Department from Employee;

Therequiredqueryis: *Select distinct Department fro*
Employee;

Q-
4.WriteanSQLquerytoprintthefirstthreecharactersofFIRST
_NAMEfromEMPLOYEEtable.
Ans.

Therequiredqueryis: *select substring(First_Name,1,3) fro*
Employee;

Q-5.WriteanSQLquerytofindthepositionofthe
alphabet(‘a’)inthefirstnamecolumn‘Amitabh’from
EMPLOYEEtable.
Ans.

Therequiredqueryis: *select INSTR(First_Name, Binary ‘a’)*
from Employee where First_Name = ‘Amitabh’;

Q-
6.WriteanSQLquerytoprinttheFIRST_NAMEfromEMPLOY
EEtableafterremovingwhitespacesfromthe

right side.Ans.

Therequiredqueryis: ***select RTRIM(First_Name)from Employee;***

Q-7.WriteanSQLquerytoprinttheDEPARTMENTfromEMPLOYEE table after removing white spaces from theleftside.
Ans.

Therequiredqueryis: ***select LTRIM(Department) from Employee;***

Q-8.WriteanSQLquerythatfetchestheuniquevaluesofDEPARTMENT from EMPLOYEE table and prints itslength.
Ans.

Therequiredqueryis: ***select distinct length(Department) fro Employee;***

Q-9.WriteanSQLquerytoprinttheFIRST_NAMEfrom EMPLOYEEtableafterreplacing‘a’with‘A’.
Ans.

Therequiredqueryis: ***select Replace(First_Name, ‘a’, ‘A’) from Employee;***

Q-10. Write an SQL query to print the FIRST_NAME andLAST_NAMEfromEMPLOYEEtableintoasinglecolumn

COMPLETE_NAME.Aspacecharshouldseparatethem.Ans.

Therequiredqueryis: ***select Contact(First_Name, ' ',Last_Name) as 'Complete_Name' from Employee*****;**

Q-11.WriteanSQLquerytoprintallEMPLOYEEdetailsfrom the EMPLOYEE table order by FIRST_NAMEAscending. Ans.

Therequiredqueryis: ***select * from Employee order by First_Name asc;***

Q-12.WriteanSQLquerytoprintallEMPLOYEEdetailsfrom the EMPLOYEE table order by FIRST_NAMEAscendingandDEPARTMENTDescending. Ans.

Therequiredqueryis: ***select * from Employee order by First_Name asc, Department desc;***

Q-13.WriteanSQLquerytoprintdetailsforEMPLOYEEswith the first name as "Vipul" and "Satish" fromEMPLOYEEtable.
Ans.

Therequiredqueryis: ***select * from Employee where First_Name in ('Vipul', 'Satish');***

Q-14.WriteanSQLquerytoprintdetailsofEMPLOYEEsexcluding first names, "Vipul" and "Satish" fromEMPLOYEEtable. Ans.

Therequiredqueryis: ***select * fro Employee where First_Name not in ('Vipul', 'Satish');***

Q-15.WriteanSQLquerytoprintdetailsofEMPLOYEEs withDEPARTMENTnameas“Admin”.
Ans.

Therequiredqueryis: *select * from Employee where Department like ‘Admin%’;*

Q-16.WriteanSQLquerytoprintdetailsoftheEMPLOYEEswhoseFIRST_NAMEcontains‘a’.Ans.

Therequiredqueryis: *select * from Employee where First_Name like ‘%a%’;*

Q-17. Write an SQL query to print details of theEMPLOYEEswhoseFIRST_NAMEendswith‘a’.Ans.

Therequiredqueryis: *select * from Employee where First_Name like ‘%a’;*

Q-18. Write an SQL query to print details of theEMPLOYEEswhoseFIRST_NAMEendswith‘h’andcontainssixalphabets.
Ans.

Therequiredqueryis: ***select * from Employee where First_Name like ‘_____h’;***

Q-19. Write an SQL query to print details of theEMPLOYEEswhoseSALARYliesbetween100000and500000.
Ans.

Therequiredqueryis: ***select * from Employee where ESalary between 100000 and 500000;***

Q-20.WriteanSQLquerytoprintdetailsofthe EMPLOYEEswhohavejoinedinFeb’2014.
Ans.

Therequiredqueryis: ***select * from Employee where year(EJoining_Date) = 2014 and month(EJoining_Date) = 2;***

Q-21.WriteanSQLquerytofetchthecountofemployees workinginthedepartment‘Admin’.
Ans.

Therequiredqueryis: ***select * Count(*) from Employee where EDepartment = ‘Admin’;***

Q-22.WriteanSQLquerytofetchEMPLOYEEnameswithsalaries >=50000and<=100000.
Ans.

Therequiredqueryis: ***select Contact(First_Name, ‘ ’, Last_Name) as Employee_Name, Salary from Employee where Eid in (select Eid from Employee where Esalary between 50000 and 100000);***

Q-23.WriteanSQLquerytofetchtheno.ofEMPLOYEEsforeachdepartmentinthedescendingorder.
Ans.

Therequiredqueryis: ***select Edepartment, count(Worker_id) No_Of_Workers from Employee Group By Edepartment Order By No_Of_Workers Desc;***

Q-24.WriteanSQLquerytoprintdetailsoftheEMPLOYEEswhoarealsoManagers.
Ans.

Therequiredqueryis: ***select Distinct e.First_Name, T.Worker_Title from Employee Inner Join title T On e.Worker_ID = T.Worker_Ref_Id And T.Worker_Title in (‘Manager’);***

Q-25.WriteanSQLquerytofetchduplicaterecordshavingmatchingdatainsome fieldsofatable.
Ans.

Therequiredqueryis:

Ans.

Therequiredqueryis: ***select Worker_Title, Affected_From, Count(*) From title Group By Worker_Title, Affected_From Having Count(*)>1;***

Q-27.WriteanSQLquerytoshowonlyevenrowsfromatable.
Ans.

Therequiredqueryis: ***select * from Employee Where MOD(Worker_id, 2) = 0;***

Q-28.WriteanSQLquerytoshowthecurrentdateandtime.
Ans. ***select Now();***

Q-29.WriteanSQLquerytoshowthetopn(say10)recordsofatable.

Ans. ***select * from Employee Order By Salary Desc Limit 10;***

Q-30.WriteanSQLquerytofetchthreemaxsalariesfromatable.

Ans.

Therequiredqueryis: ***select * from Employee Order By Salary Desc Limit 3;***