LIBRARY MANAGEMENT SYSTEM

GENERAL DESCRIPTION :

Library Management System is computerized system which he|ps

user(librarian) to manage the library daily activity in electronic format. It reduces the paper

work such as file lost, file damaged and time consuming. It can help user to manage the

transaction or record more effectively and time saving .

PROBLEM STATEMENT :

The problem occurred before having computerized system includes :

1. File Lost:

When computerized system is not implemented file is always lost because of human

environment. Sometimes due to some human error there may be a loss of records.

2. File Damaged:

Ell

When computerized system is not there file is always lost due to some accident

Like spilling of water by some member on file accidentally.

Besides some natural disaster like floods or fires may also damage files.

3. Difficult To Search Records :

When there is no computerized system there is always a difficulty in searching of

records if the records are large in number.

4. Space Consuming :

5. Cost Consuming :

As there is no computerize

which will increase the cos

SYSTEM ANALYSIS AND REQUIREMENTS

>> NON FUNCTIONAL REQUIREMENTS

Product Requirements ”

1. EFFICIENCY REQUIREMENT :

When a library Management system will be implemented librarian and user will

easily acess library as searching and book transaction will be very faster.

2. RELIABILITY REQUIREMENT :

The system should accurately performs member registration, member validation ,

report generation, book transaction and search

3. USABILITY REQUIREMENT :

The system is designed for a user friendly environment so that student and staff of

library can perform the various tasks easily and in an effective way.

>> FUNCTIONAL REQUIREMENTS

1. NORMAL USER

i) USER LOGIN

>> Description of feature :

Password before they are allowed to enter the system .Eve

The user id and password will be verified and if invalid id |

system.

ry reader has different id and password.

s there user js allowed to not enter the

>> Functional requirements

-user id is provided when they register

-The system must only allow user with valid id and password to enter the system

-The system performs authorization process which decides What user level can acess to

-The user must be able to logout after they finished using system.

ii) REGISTER NEW USER

>> Description of feature

This feature can be performed by all users to register new user tg Create account,

>> Functional requirements

-System must be able to verify information

-System must be able to delete information if information is wrong

iii) REGISTER NEW BOOK

>> Description of feature :

This feature allows to add new books to the library

>> Functional requirements

-System must be able to verify information

“System must be able to enter number of copies into table.

- System must be able to not allow two books having same book id.

iv) SEARCH BOOK

>> DESCRIPTION OF FEATURE

This feature is found in book Maintenance part We can search book based on book id,

book name » Publication or by author name,

>> Functional requirements

- System must be able to search the database based on select search type

- System must be able to filter book based on keyword enterd

- System must be able to show the filtered book in table view

Functional requirements

-System should be able to add detailed information about events

SOFTWARE AND HARDWARE ANALYS|S AND R

QUIREMENTS

SOFTWARE : :

>> Any Operating system for we browse interface.

>> Database MYSQL-MYSQL is used as database as it €asy to main,

tain ang retrieve

records by simple queries which are in English language which are

Basy to

understand and easy to write.

HARDWARE :

>> Atleast 1GB storage on the server side.

>> Internet connection on both reader and server side.

DATA COLLECTION:

1)

2)

3)

4)

5)

6)

Reader:

MEM\_(D F NAME L\_NAME | ADDRESS ]

1 Surajit Sasmal Midnapore Hl

2 Srijan Das Burdwan i

Book:

BOOK\_ID AUTHOR TITLE PRICE EDITION | CATEGORY |

1000 Korth DBMS 500 7th | CSE 7

1001 Galvin 0S 750 9th | cse |

Read:

MEM\_ID | BOOK\_ID

1 1000

2 1001

Publisher:

P\_ID P\_NAME P\_CITY

123456 Santra Kolkata

234567 Pearson Chennai

Publish:

P\_ID BOOK\_ID

123456 1000

234567 1001

Staff:

S\_ID S\_NAME DESIGNATION

100000 Deesha Adhikary CEO

| 200000 I Sajib Sen Compounder

7) Guide:

S\_ID | MEM\_ID

100000 1

200000 2

8) Maintain:

[sao [B0OOK\_ID

100000 1000

[ 200000 1001

9) Buy\_book:

100000 | 123456

[200000 | 234567

E-R DIAGRAM:

ur Publisher

F.Name Surname Title Address

AN / Atther Book ID Publisher

aie Category \ Name

/ : Reads/ » publishes —— Publisher

Reader Had Fass

AN EN Price Edition Publisher ID

Address

Guides Maintains Buy books

from

¥ staff

staff ID Designation

Staff Name

LIBRARY MANAGEMENT SYSTEM

Assignment 1

0 Question 1: Create the following tables:

Table name: EMPLOYEE Structure:

EMP\_CODE char(16)

EMP\_NAME char(20)

DEPT CODE char(16)

DESIG CODE char(16)

SEX char(1)

ADDRESS char (25)

CITY char (20)

STATE char (20)

PIN char (6)

BASIC Number

JN\_DT Date

Primary key is EMP\_CODE

Table name: DESIGNATION Structure:

DESIG\_CODE char( 16)

DESIG DESC char(20)

Primary key is DESIG\_CODE

Table name: DEPARTMENT Structure:

DEPT\_CODE char(16)

DEPT\_NAME char(20)

Primary key is DEPT\_CODE.

Solution:

SQL> CREATE TABLE EMPLOYEE(

EMP\_CODE varchar(16) NOT NULL PRIMARY KEY,

EMP\_NAME varchar(20),

DEPT\_CODE varchar(16),

2

3

4

5 DESIG\_CODE varchar(16),

6 SEX varchar(l),

7 ADDRESS varchar(25),

8 CITY varchar(20),

9 STATE varchar(20),

10 PIN varchar(6),

11 BASIC int,

12 JN\_DT Date);

Table created.

SQL> CREATE TABLE DESIGNATION(

2 DESIG\_CODE varchar(16) NOT NULL PRIMARY KEY,

3 DESIG\_DESC varchar(20));

Table created.

SQL> CREATE TABLE DEPARTMENT

2 DEPT\_CODE varchar(16) NOT NULL PRIMARY KEY,

3 DEPT\_NAME varchar(20));

Table created.

U Question 2: Display the structure of each table.

Solution:

SQL> DESC EMPLOYEE;

2|Page

EMP\_CODE NOT NULL VARCHAR2(16)

EMP\_NAME VARCHAR2(20)

PEPT\_CODE VARCHAR2(16) DESIG\_CODE

VARCHAR?2(16)

SEX VARCHAR2(1)

ADDRESS VARCHAR2(25)

CITY VARCHAR2(20)

STATE VARCHAR2(20)

PIN VARCHAR2(6)

BASIC NUMBER(38)

JN\_DT DATE

SQL> DESC DESIGNATION ;

Name Null? Type

DESIG\_CODE NOT NULL VARCHAR2(16)

DESIG\_DESC VARCHAR? (20)

SQL> DESC DEPARTMENT;

Name Null? Type

DEPT\_CODE NOT NULL VARCHAR2(16) DEPT Nap

VARCHAR2(20)

0 Question 3. Insert few rows jp each table.

[While entering data in Epp table use DESIG\_C ta

DESIGNATION table and DEPT copg which 18 oy — Brel nn

table. In DESIGNATION table, assign code for M ign code for Pers Mice,

clerk and helper. In DEPARTMENT table, get onts] Ung

Production, Purchase, Finance, Research dP

SQL> INSERT INTO DEPARTMENT(DEPT\_CODE, DEPT\_NAME)

VALUES(PER', Personnel’);

1 row created.

SQL> INSERT INTO DEPARTMENT(DEPT\_CODE, DEPT\_NAME)

VALUES('PR' »' Production’);

1 row created.

SQL> INSERT INTO DEPARTMENT

VALUES('PUR',' Purchase);

1 row created.

(DEPT\_CODE, DEPT\_NAME)

SQL> INSERT INTO DEPARTMENT

(DEPT\_CODE, DEPT\_NAME)

VALUES(' FI','Finance');

1 row created.

SQL> INSERT INTO DEPARTMENT

VALUES(RE', Research);

1 row created.

(DEPT\_CODE, DEPT\_NAME)

SQL> INSERT INTO DESIGNATION(DESIG\_CODE, DESIG\_DESC)

VALUES(MN','Manager);

1 row created.

SQL> INSERT INTO DESIGNATION(DESIG\_CODE, DESIG\_DESC)

VALUES(EXE,'Executive);

1 row created.

SQL> INSERT INTO DESIGNATION(DESIG\_CODE, DESIG DESC)

VALUES('OFF','Officer'); -

1 row created.

SQL> INSERT INTO DESIGNATION(DESIG\_CODE, DESIG\_DESC)

4|Page

VALUES('CL', Clerk’);

1 row created.

SQL> INSERT INTO DESIGNATION(DESIG\_CODE, DESIG\_DESC)

VALUES(HL', Helper’);

1 row created.

SQL> SELECT \* FROM DEPARTMENT;

DEPT\_CODE DEPT\_NAME

PER Personnel

PR Production

PUR Purchase

FI Finance

RE Research

SQL> SELECT \* FROM DESIGNATION H

DESIG\_CODE DESIG\_DESC

MN Manager

EXE Executive

OFF Officer

CL Clerk

HL Helper

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN\_DT) VALUES

2 (E101', Kavya Kulkarni’, PR", EXE", p16 1B Old Post Office

Road Mumbal', Maharashtra’, 40002345000, DAT '2021-02-22');

— ~ 5|Ppage

1 row Created.

2 (E102','Kasturj Sanyal','FI,'OFF', F', Fergusson College

Road','Pune', Maharaght,

a','411 101',50000,DATE '202 1-06-02');

1 row created.

SQL> INSERT INTO EMPLOYEE

DESIG\_CODE, SEX, ADDRESS,

2 (‘E103','Akash Ahuja’, PUR','MN',M','Satyam Industrial

Estate','Pune’, Maharashtra’ '42 1 108',60000,DATE 2020-09-07);

(EMP\_CODE, EMP\_NAME, DEPT\_CODE,

CITY, STATE, PIN, BASIC, JN\_DT) VALUES

1 row created.

SQL> INSERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, DEPT\_CODE,

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN\_DT) VALUES

4A Gopal Banerjee

»30000,DATE '2022-01-03));

2 ('E104','Preeti Kumari','RE','HL','F','1

Lane','Kolkata',' West Bengal','700014'

1 row created.

SQL> INSERT INTO EMPLOYEE (EMP\_CODE, EMP\_

NAME, DEPT\_CODE,

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN,

BASIC, JN\_DT) VALUES

2 (E105','Mayank Agarwal’, FI, 'CL',M,'S1A S.P. Mukherjee

Road','Kolkata',' West Bengal','’700026',25000, DATE '2022-01-02));

1 row created.

SQL> INSERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, D

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, J

2 ('E106','Piyush Prajapati',PUR','EXE','M’,'12 Marine

EPT\_CODE,

N\_DT) VALUES

6|Page

ET —

Lines’, Mumbai’, Maharashtra’, 400020',40000, DATE

2021-050)

1 row created. ODE,

SQL> INSERT INTO EMPLOY vALUES

DESIG\_CODE, SEX, ADDRES

'PR','MN','M','40 Umashankar Jos

' '380009',60000,DATE '2020-

C

EE(EMP\_CODE, EMP\_NAME, DEFT

Ss, CITY, STATE, PIN, BASIC, JN\_

hi

2 (E107, Dhruv Byas, 2-02);

Marg',’Ahmedabad’,'Gujarat

1 row created.

SERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, DEPT\_CODE,

SQL> IN

N, BASIC, JN\_DT) VALUES

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PI

2 (E108','Ritu Das',PER','OFF','F', Indiranagar Double

Road','Bangalore’,'Karnataka','560038',55000,DATE '2020-03-05');

1 row created.

SQL> INSERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, DEPT\_CODE,

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN\_DT) VALUES

2 (E109','Maitrayee Dutta',",'CL','F",'19 Ashoka Rd,

Janpath','Delhi','Delhi’,'110001',25000,DATE '2021-04-09');

1 row created.

SQL> INSERT INTO EMPLOYEE(EMP\_CO

\_CODE, EMP\_NAME, DEPT

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN oT) ve,

PE ES

2 ('E110','Vikram Sen',",'EXE','M','Satyanarayan

Market','Patna’,'Bihar’,'800034',20000, DATE '202 1-11-12");

1 row created.

71Pag,

Solution:

E,

SQL> INSERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, DER ALUES

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN\_

2 (E111')Anindita Baagchi',",CL',F', Gulmohar Park

Mall’, Ahmedabad’, Gujarat’, '350098',0,DATE 2021-03-09’);

1 row created.

SQL> INSERT INTO EMPLOYEE(EMP\_CODE, EMP\_NAME, DEPT\_CODE,

DESIG\_CODE, SEX, ADDRESS, CITY, STATE, PIN, BASIC, JN\_DT) VA

2 (E112','Gautam Shashtri',",'OFF',M','574 Gurdwara

Road’, Delhi', Delhi’, 110048'," ,DATE '2020-11-23);

1 row created.

SQL> SELECT \* FROM EMPLOYEE;

EMP\_CODE EMP\_NAME DEPT\_CODE DESIG\_CODE S

TT ee ee el ------- - ADDRESS

CITY STATE PIN

BASIC JN\_DT

E101 Kavya Kulkarni PR EXE F

61B Old Post Office Road Mumbai Maharashtra 400023

45000 22-FEB-21

E102 Kasturi Sanyal FI OFF F

Fergusson College Road Pune Maharashtra 411101

50000 02-JUN-21

E103 Akash Ahuja PUR MN M

Satyam Industrial Estate Pune Maharashtra 421108

60000 07-SEP-20

RE HL F

E104 Preeti Kumari

West Bengal 700014

14A Gopal Banerjee Lane Kolkata

E105 Mayank Agarwal FI CL M

S51A S.P. Mukherjee Road Kolkata West Bengal 700026

25000 02-JAN-22

E106 Piyush Prajapati PUR EXE M

12 Marine Lines Mumbai Maharashtra 400020

40000 04-MAY-21

E107 Dhruv Byas PR MN M

40 Umashankar Joshi Marg Ahmedabad Gujarat 380009

60000 02-FEB-20

E108 Ritu Das PER OFF F

Indiranagar Double Road Bangalore Karnataka 560038

55000 05-MAR-20

E109 Maitrayee Dutta CL F

19 Ashoka Rd, Janpath Delhi Delhi 110001

25000 09-APR-21

E110 Vikram Sen EXE M

Satyanarayan Market Patna Bihar 800034

20000 12-NOV-21

CL F

E111 Anindita Baagchi

9|Page

Gulmohar Park Mall Ahmedabad

Gujarat 350098

09-MAR-21

E112 Gautam Shashtri OFF M

574 Gurdwara Road Delhi Delhi 110048 23-

NOV-20

12 rows selected.

a Question 5: Find the rows with unassigned DEPT \_CODE.

Solution.

SQL> SELECT \* FROM EMPLOYEE WHERE DEPT \_CODE IS NULL;

EMP\_CODE EMP\_NAME DEPT\_CODE DESIG\_CODE S

mmm mmmmmmmmmememmeeee - --------- - ADDRESS

CITY STATE PIN

BASIC JN\_DT

E109 Maitrayee Dutta CL F

19 Ashoka Rd, Janpath Delhi Delhi 110001

25000 09-APR-21

E110 Vikram Sen EXE M

Satyanarayan Market Patna Bihar 800034

20000 12-NOV-21

E111 Anindita Baagchi CL F

— © 10|Page

Gujaral | LARA

Gulmohar Park Mall Ahmedabad

0 09-MAR-21

M

OFF

£112 Gautam Shashtri 110048

574 Gurdwara Road Delhi Delhi

23-NOV-20

on:

\* Question 6: Find the rows with BASIC equal to 0. Soluti

SQL> SELECT \* FROM EMPLOYEE WHERE BASIC = 0;

EMP\_CODE EMP\_NAME DEPT\_CODE DESIG\_CODE

me ee eee eee eee - ADDRESS

CITY STATE PIN

BASIC JN\_DT

E111 Anindita Baagchi CL F

Gulmohar Park Mall Ahmedabad Gujarat 350098

0 09-MAR-21

\* Question 7: Find the rows with unassigned Basic [note dow th

difference between the results obtained in Q.6 and Q.7) Soluty, e

n:

SQL> SELECT \* FROM EMPLOYEE WHERE BASIC IS NULL;

EMP\_CODE EMP\_NAME DEPT\_CODE DESIG\_cqp,

TTT TTT TTT Tee ee - ADDRggg S

CITY STATE PIN wommmmmomocooococeeeeeeee ee X

BASIC JN\_DT

11

LEY

M

E112 Gautam Shashtri OFF 10048 23-

574 Gurdwara Road Delhi Delhi

NOV-20

. Question 8: Find the average BASIC of the employees.

Solution:

SQL> SELECT AVG(BASIC) FROM EMPLOYEE;

AVG(BASIC)

37272.7273

. Question 9: Replace the BASIC with O for the rows with unassigned

BASIC.

Solution:

SQL> UPDATE EMPLOYEE

2 SET BASIC =0

3 WHERE BASIC IS NULL;

1 row updated.

obtained in Q.8 & Q.10.)

Solution:

Question 10. Find the average BASIC. (Note the difference of result

SQL> SELECT AVG(BASIC) FROM EMPLOYEE;

AVG(BASIC)

34166.6667

+ Question 11. Delete the rows with unassigned DEPT\_CODE,

Solution:

SQL> DELETE FROM EMPLOYEE WHERE DEPT \_CODE IS NULL;

4 rows deleted.

U Question 12: Say, Net pay of an employee= Basic+ HRA+ DA Where Hp,

is 50% of the Basic & DA is 40% of Basic. Show the employee nap,

& Net pay for all employees.

Solution:

SQL> SELECT EMP\_NAME, BASIC \* 0.4 + BASIC \* 0.5 AS NET PAY F

EMPLOYEE; —PAY FROM

EMP\_NAME NET PAY

Kavya Kulkarni 40500

Kasturi Sanyal 45000

Akash Ahuja 54000

Preeti Kumari 27000

Mayank Agarwal 22500

Piyush Prajapati 36000

Dhruv Byas 54000

Ritu Das 49500

8 rows selected.

U Question 13: Show the EMP NAME & BAS|C 4,

DEPT CODE. The employee name must “Phen app ding order of

ICase.

B3Page

Solution:

SQL> SELECT UPPER(EMP\_NAME), BASIC

2 FROM EMPLOYEE

3 ORDER BY BASIC;

UPPER(EMP\_NAME)

BASIC

MAYANK AGARWAL 25000

PREETI KUMARI 30000

PIYUSH PRAJAPATI 40000

KAVYA KULKARNI 45000

KASTURI SANYAL 50000

RITU DAS 55000

AKASH AHUJA 60000

DHRUV BYAS 60000

8 rows selected.

0 Question 14: Find the employees who have joined after 1st January

2010

Solution:

SQL> SELECT EMP\_NAME AS EMPLOYEE\_NAME, JN\_DT AS JOIN\_DATE

2 FROM EMPLOYEE

3 WHERE JN\_DT > DATE '2020-01-01%

EMPLOYEE\_NAME JOIN\_DATE

Kavya Kulkarni 22-FEB-21

Kasturi Sanyal 02-JUN-21

Akash Ahuja 07-SEP-20

Preeti Kumari 03-JAN-22

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Mayank Agarwal ~~ 02-JAN-22

Piyush Prajapati 04-MAY-21

Dhruv Byas 02-FEB-20

Ritu Das 05-MAR-20

8 rows selected.

\* Question 15: Find, how many employees have joined in the month

January?

Solution:

SQL> SELECT COUNT

(\*) FROM EMPLOYEE WHERE SUBSTR(JN\_DT,4,3) =

'JAN';

COUNT(\*)

Question 16: Find the maximum & minimum

Basic Solution:

SQL> SELECT MAX(BASIC),

MIN(BASIC) FROM EMPLOYEE.

MAX(BASIC) MIN(BASIC)

60000 25000

\* Question 17: Find how many Female employees are theres

Solution:

SQL> SELECT COUNT

\*) FROM EMPLOYEE WHERE SEX = pv.

COUNT(¥)

+ Question 18: Replace CI

uppercase for all rows, TY with existing value converted into

Solution:

SQL> UPDATE EMPLOYEE SET CITY = UPPER(CITY);

8 rows updated.

SQL> SELECT CITY FROM EMPLOYEE;

MUMBAI

PUNE

PUNE

KOLKATA

KOLKATA

MUMBAI

AHMEDABAD

BANGALORE

8 rows selected.

\* Question 19: Find in how many different cities various employees

are residing?

Solution:

SOL> SELECT CITY, COUNT(¥ FROM EMPLOYEE GROUP BY CITY;

CITY COUNT(¥)

A — MUMBAI

2

KOLKATA 2

PUNE 2

AHMEDABAD 1

BANGALORE

yee information in the ascendin,

+ Question 20: Display the emplo a Department, it should be i, the

order of DEPT\_CODE and within

descending order of BASIC.

Solution:

SQL> SELECT \* FROM EMPLOYEE

2 ORDER BY DEPT\_CODE,

3 BASIC DESC;

EMP\_CODE EMP\_NAME DEPT\_CODE DESIG\_CODE

E102 Kasturi Sanya] FI OFF F

Fergusson College Road PUNE Maharaghyy, 41110;

50000 02-JUN-2 1

E105 Mayank Agarwal FI CL

S1A S.P. Mukherjee Road KOLKATA West Beng, M

25000 02-JAN-22 700026

E108 Ritu Das PER OFF F

Indiranagar Double Road BANGALORE Karnatgy,,

55000 05-MAR-20 360034

E107 Dhruv Byas PR MN M

40 Umashankar Joshi Marg AHMEDABAD Gujarat

8004,

60000 02-FEB-20

E101 Kavya Kulkarni PR

61B Old Post Office Road MUMBA]

45000 22-FEB-21

E103 Akash Ahuja PUR

Satyam Industrial Estate PUNE

60000 07-SEP-20

E106 Piyush Prajapati PUR

12 Marine Lines MUMBAI

40000 04-MAY-21

E104 Preeti Kumari RE

14A Gopal Banerjee Lane KOLKATA

30000 03-JAN-22

8 rows selected.

EXE F

Maharashtra 400023

MN M

Maharashtra 421108

EXE M

Maharashtra 400020

HL F

West Bengal 700014

Assignment II

Question 1: From the EMP table show the minimum, maximum and

average basic for each department(show dept, code).

Solution:

SQL> SELECT DEPT\_CODE, MIN(BASIC), MAX(BASIC), AVG(BASIC) FROM

EMPLOYEE GROUP BY DEPT\_CODE;

DEPT\_CODE ~~ MIN(BASIC) MAX(BASIC) AVG(BASIC)

PR 45000 60000 52500

RE 30000 30000 30000

FI 25000 50000 37500

PER 55000 55000 55000

PUR 40000 60000 50000

\* Question 2: Find the number of female employees in each

department (show dept. Code).

Solution:

SQL> SELECT DEPT CODE » COUNT(\*) FROM EMPLOYEE WHERE SEX =

'F

GROUP BY DEPT\_CODE;

DEPT\_CODE COUNT(\*)

PR 1

RE 1

FI 1

PER 1

\* Question 3: Find the city wise no.

of employees for each department

(show dept. Code).

Solution:

SQL> SELECT DEPT\_CODE, CITY, COUNT(\*) FROM EMPLOYEE GROUP By

DEPT\_CODE, CITY;

DEPT CODE CITY COUNT(\*)

1|Page

FI KOLKATA 1

PR MUMBAI 1

PER BANGALORE 1

PUR "PUNE 1

FI PUNE 1

RE KOLKATA 1

PR AHMEDABAD 1

PUR MUMBAI 1

8 rows selected.

\* Question 4: Show the designation wise no of employees who have

joined in the year 2020 in each department. The listing should

appear in the ascending order of no. of employees.

Solution:

SQL> SELECT DESIG\_CODE , COUNT(\*) FROM EMPLOYEE WHERE

SUBSTR(JN\_DT,8,2) = '20' GROUP BY DESIG\_CODE ORDER BY COUNT;

DESIG\_CODE COUNT(¥

\* Question 5: Find the department

cod

employees only for the departments fora, tal

than 50,000 and the listing should

total basic.

basic of male

: for which such total is more

PPear in the descending order of

Solution:

SQL> SELECT DEPT\_CODE , SUM(BASIC) AS ToT

2 FROM EMPLOYEE

3 WHERE SEX ='M'

4 GROUP BY DEPT\_CODE HAVING SUM(BASIC) > 59,

5 ORDER BY SUM(BASIC) DESC; 0

L\_BAs|C

DEPT\_CODE TOTAL\_BASIC

PUR 100000

PR 60000

0 Question 6: Show the employee \_name, Designation de

basic for all employees. Scrip, on 4

ad

J 2p:

F- | Pag.

Solution:

SQL> SELECT e.EMP\_NAME, d.DESIG\_DESC , e.BASIC FROM EMPLOYEE

e, DESIGNATION d

2 WHERE e.DESIG\_CODE = d.DESIG\_CODE;

EMP\_NAME

DESIG\_DESC BASIC

Kavya Kulkarni Executive 45000

Kasturi Sanyal Officer 50000

Akash Ahuja Manager 60000

Preeti Kumari Helper 30000

Mayank Agarwal Clerk 25000

Piyush Prajapati Executive 40000

Dhruv Byas Manager 60000

Ritu Das Officer 55000

8 rows selected.

U Question 7: Show the employee name, Designation description,

Department Name & Basic for all employees.

Solution:

SQL> SELECT e.EMP\_NAME, d.DESIG\_DESC, dp.DEPT\_NAME, e.BASIC

2 FROM EMPLOYEE e, DESIGNATION d, DEPARTMENT dp

3 WHERE e.DESIG\_CODE = d.DESIG\_CODE AND

4 e.DEPT\_CODE = dp.DEPT\_CODE;

EMP\_NAME DESIG\_DESC DEPT\_NAME BASIC

Kavya Kulkarni Executive Production 45000

Kasturi Sanyal Officer Finance 50000

Akash Ahuja Manager Purchase 60000

Preeti Kumari Helper Research 30000

Mayank Agarwal Clerk Finance 25000

Piyush Prajapati Executive Purchase 40000

Dhruv Byas Manager Production 60000

Ritu Das Officer Personnel 55000

8 rows selected.

1] Question 8: Find the department Codes in which no employee works.

3|Page

[The Employes table doesn’t contain any entry to give oy

€

tput g,, ty

query. So, I have inserted a data entry.]

SQL> INSERT INTO DEPARTMENT VALUES(MR', MARKETTING),

created.

SQL> SELECT DEPT\_CODE FROM DEPARTMENT WHERE DEPT\_cop,

NOT IN

2 (SELECT DEPT\_CODE FROM EMPLOYEE);

DEPT\_CODE

OU Question 10: Find the ge

: Partm

employee’s works, “Rt nameq Where a¢ least 39

Solution:

’ PR, 'OFF", 'F, ‘New P.O. Ro vo,

‘Maharashtra’, 421345',70000,DATE 2020-04-03), ad’, Pune: