



Atma Ram Sanatan Dharma Collage
University of Delhi



DATABASE MANAGMENT SYSTEM

Practical file

Submitted By -
Suraj Rai
Roll no. 21/18102
BSc (Hons) Computer Science

Submitted By -
Manisha Bargi Ma'am
Department of Computer Science

INDEX

S No.	Objective
1	Query to display Employee Name, Job, Hire Date, Employee Number; for each employee with the Employee Number appearing first.
2	Query to display unique jobs from the Employee Table.
3	Query to display the Employee Name concatenated by a Job separated by a comma.
4	Query to display all the data from the Employee Table. Separate each Column by a comma and name the said column as THE_OUTPUT.
5	Query to display the Employee Name and Salary of all the employees earning more than \$2850.
6	Query to display Employee Name and Department Number for the Employee No = 79.
7	Query to display Employee Name and Salary for all employees whose salary is not in the range of \$1500 and \$2850.
8	Query to display Employee Name and Department No. of all the employees in Dept 10 and Dept 30 in the alphabetical order by name.
9	Query to display Name and Hire Date of every Employee who was hired in 1981.
10	Query to display Name and Job of all employees who have not been assigned a supervisor.
11	Query to display the Name, Salary and Commission for all the employees who earn commission.

12 Sort the data in descending order of Salary and Commission.

13 Query to display Name of all the employees where the third letter of their name is 'A'.

14 Query to display Name of all employees either have two 'R's or have two 'A's in their name and are either in Dept No = 30 or their Manger's Employee No = '778'.

16 Query to display the Current Date along with the day name.

17 Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after six months of employment.

18 Query to display Name and calculate the number of months between today and the date on which employee was hired of department 'Purchase'.

19 Query to display the following for each employee <E-Name> earns < Salary> monthly but wants < 3 * Current Salary >. Label the Column as Dream Salary.

20 Query to display Name with the 1st letter capitalized and all other letter lower case and length of their name of all the employees whose name starts with 'J', 'A' and 'M'.

DATABASE SCHEMA

RELATION : EMPLOYEE

```
mysql> DESC EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
Eno	char(3)	NO	PRI	NULL	
Ename	varchar(50)	NO		NULL	
Job_type	varchar(50)	NO		NULL	
SupervisorEno	char(3)	YES	MUL	NULL	
Hire_date	date	NO		NULL	
Dno	int	YES	MUL	NULL	
Commission	decimal(10,2)	YES		NULL	
Salary	decimal(7,2)	NO		NULL	

```
8 rows in set (0.01 sec)
```

RELATION: DEPARTMENT

```
mysql> DESC DEPARTMENT;
```

Field	Type	Null	Key	Default	Extra
Dno	int	NO	PRI	NULL	
Dname	varchar(50)	YES		NULL	
Location	varchar(50)	YES		New Delhi	

```
3 rows in set (0.00 sec)
```

DDL

```
CREATE TABLE EMPLOYEE
```

```
(  
    Eno          CHAR(3)    NOT NULL,  
    Ename        VARCHAR(50) NOT NULL,  
    Job_type     VARCHAR(50) NOT NULL,  
    SupervisorEno CHAR(3),  
    Hire_date    DATE       NOT NULL,  
    Dno          INT,  
    Commission   DEC(10, 2),  
    Salary       DEC(7, 2)  NOT NULL,  
    PRIMARY KEY (Eno)  
);
```

```
CREATE TABLE DEPARTMENT
```

```
(  
    Dno      INT NOT NULL,  
    Dname    VARCHAR(50),  
    Location VARCHAR(50) DEFAULT 'New Delhi',  
    PRIMARY KEY (Dno)  
);
```

```
ALTER TABLE EMPLOYEE
```

```
ADD CONSTRAINT SupervisorConstraint  
FOREIGN KEY (SupervisorEno) REFERENCES EMPLOYEE (Eno);
```

```
ALTER TABLE EMPLOYEE
```

```
ADD CONSTRAINT DepartmentConstraint  
FOREIGN KEY (Dno) REFERENCES DEPARTMENT (Dno);
```

DML

```
INSERT INTO DEPARTMENT
VALUES (10, 'Headquarters', 'Mumbai'),
       (45, 'Legal', 'Mumbai'),
       (30, 'IT', 'Bengaluru'),
       (20, 'Outreach', 'Dallas'),
       (95, 'Purchase', 'Dallas');
```

```
INSERT INTO DEPARTMENT (Dno, Dname)
VALUES (90, 'Sales'),
       (40, 'Administration'),
       (50, 'Research');
```

```
INSERT INTO EMPLOYEE
VALUES ('778', 'John Smith', 'Managing Director', NULL, '1980-06-12', 10, NULL, 5800.23),
       ('153', 'Andy Beaford', 'VP Accounting', '778', '2000-09-08', 40, NULL, 502.30),
       ('23', 'Sudipto Ghosh', 'SDE Manager', '778', '1981-11-21', 30, NULL, 2465.92),
       ('25', 'Anmol Gupta', 'Accounts Manager', '778', '1981-09-11', 40, NULL, 2865.92),
       ('86', 'Tania Chauhan', 'Sales Manager', '778', '1983-08-14', 90, 235.90, 2921.37),
       ('89', 'Alicia Jones', 'Purchase Manager', '778', '1982-10-26', 95, NULL, 980.35),
       ('232', 'Isa Jaques', 'Legal Manager', '778', '1996-07-23', 45, NULL, 651.05),
       ('520', 'King Hethron', 'Sales Manager', '778', '2015-10-13', 90, NULL, 497.18),
       ('188', 'Sherline Harbord', 'Audit Manager', '778', '1995-08-05', 40, NULL, 926.42),
       ('146', 'Donielle Tuite', 'Sales Representative', '520', '2016-06-12', 90, NULL, 171.60),
       ('125', 'Gurpreet Singh', 'Intern', NULL, '2008-05-15', NULL, NULL, 521.37),
       ('243', 'Marie Brahm', 'Systems Engineer', '23', '1983-06-22', 40, NULL, 876.78),
       ('299', 'Mahala Burtwhistle', 'Compensation Analyst', '89', '1990-07-20', 95, NULL, 602.86),
       ('354', 'Bryna McKenny', 'Financial Advisor', '153', '2001-10-11', 90, NULL, 693.63),
       ('421', 'Ulberto Gosz', 'Office Assistant', NULL, '2017-02-07', 10, NULL, 381.64),
       ('442', 'Netti Dellenbrok', 'Graphic Designer', '23', '2014-05-14', 30, NULL, 790.82),
       ('492', 'Salmon Gough', 'Marketing Assistant', '86', '2008-12-13', 90, 148.80, 998.32),
       ('504', 'Berny Bonas', 'Executive Secretary', '778', '2008-05-24', 40, NULL, 779.34),
       ('516', 'Lowell Paule', 'Systems Administrator', '23', '2008-03-31', 30, 324.39, 969.66),
       ('518', 'Nicholas Comelini', 'Tax Accountant', '188', '1997-03-20', 90, 546.04, 882.53);
```

```
INSERT INTO EMPLOYEE
VALUES ('528', 'Laurence Grosvener', 'Sales Intern', '520', '2019-09-06', 90, 950.33, 244.37),
       ('611', 'Brandtr Wildbore', 'Software Test Engineer', '23', '2000-04-14', 30, NULL, 704.23),
       ('697', 'Druci Sixsmith', 'Help Desk Technician', NULL, '2005-07-27', 10, 530.53, 387.43),
       ('718', 'Oneida Hicklingbottom', 'Payment Coordinator', '89', '2006-03-25', 95, NULL, 789.82),
       ('732', 'Gannie Quantrell', 'Automation Engineer', '23', '2019-04-29', 30, NULL, 174.12),
       ('783', 'Fran Lening', 'Analyst Programmer', '23', '1981-05-27', 30, NULL, 471.17),
       ('79', 'Rahul Sahay', 'SDE Intern', '23', '2004-08-14', 30, NULL, 2921.37),
       ('811', 'Shay Restieaux', 'Lawyer', '232', '1999-04-16', 45, 574.68, 500.22),
       ('823', 'Marcille Occleshaw', 'Lawyer', '232', '2003-12-27', 45, 453.52, 507.10),
       ('832', 'Desiri Allott', 'Payment Coordinator', '89', '1997-11-04', 95, 239.84, 683.09),
       ('87', 'Blake Lewis', 'Sales Intern', '86', '2008-05-02', 90, 125.45, 921.37),
       ('908', 'Gustav Waring', 'Software Engineer', '23', '2002-12-23', 30, NULL, 141.05),
       ('960', 'Virge Swancott', 'Web Developer', '23', '1984-01-23', 30, NULL, 292.48),
       ('969', 'Lee Prattin', 'Backend Developer', '23', '1986-01-23', 30, NULL, 296.48),
       ('997', 'Mag Giacomo', 'GIS Technical Architect', '23', '2002-12-23', 30, NULL, 427.98),
       ('785', 'Chandal McBrier', 'Software Consultant', '23', '1998-02-10', 30, NULL, 697.68),
       ('659', 'Martha Annies', 'Web Developer', '23', '2008-11-03', 30, NULL, 200.80),
       ('932', 'Selestina Herries', 'Software Engineer III', '23', '2013-05-23', 30, NULL, 239.27),
       ('837', 'Ashil Burney', 'Automation Engineer', '23', '1987-03-29', 30, NULL, 586.13);
```

```
INSERT INTO EMPLOYEE
VALUES ('763', 'Rodrick Haighton', 'Computer Systems Analyst', '23', '2000-05-08', 30, NULL, 627.74),
       ('981', 'Nina Fisby', 'Systems Administrator', '23', '2017-07-26', 30, 324.39, 920.84),
       ('498', 'Skell Woolerton', 'Software Test Engineer', '23', '2004-04-04', 30, NULL, 506.44),
       ('809', 'Cornie Munby', 'Software Consultant', '23', '1986-06-07', 30, NULL, 688.37),
       ('915', 'Layton Murrie', 'Graphic Designer', '23', '2006-06-24', 30, NULL, 640.31),
       ('842', 'Rivy Buzek', 'Help Desk Technician', NULL, '1982-05-25', 30, NULL, 295.31);
```

QUERY -1

Description

Query to display Employee Name, Job, Hire Date, Employee Number for each employee with the Employee Number appearing first.

Query

```
-- Q1
SELECT  Eno,
        Ename,
        Job_type,
        Hire_date
FROM EMPLOYEE;
```

Results

```
mysql> SELECT Eno,
→          Ename,
→          Job_type,
→          Hire_date
→ FROM EMPLOYEE
→ LIMIT 10;
```

Eno	Ename	Job_type	Hire_date
125	Gurpreet Singh	Intern	2008-05-15
146	Donielle Tuite	Sales Representative	2016-06-12
153	Andy Beaford	VP Accounting	2000-09-08
188	Sherline Harbord	Audit Manager	1995-08-05
23	Sudipto Ghosh	SDE Manager	1981-11-21
232	Isa Jaques	Legal Manager	1996-07-23
243	Marie Brahms	Systems Engineer	1983-06-22
25	Anmol Gupta	Accounts Manager	1981-09-11
299	Mahala Burtwhistle	Compensation Analyst	1990-07-20
354	Bryna McKenny	Financial Advisor	2001-10-11

10 rows in set (0.00 sec)

QUERY - 2

Description

Query to display unique jobs from the Employee Table.

Query

```
-- Q2  
SELECT DISTINCT Job_type  
FROM EMPLOYEE;
```

Results

```
mysql> SELECT DISTINCT Job_type  
→ FROM EMPLOYEE  
→ LIMIT 10;
```

Job_type
Intern
Sales Representative
VP Accounting
Audit Manager
SDE Manager
Legal Manager
Systems Engineer
Accounts Manager
Compensation Analyst
Financial Advisor

```
10 rows in set (0.00 sec)
```


QUERY - 3

Description

Query to display the Employee Name concatenated by a Job separated by a comma.

Query

```
-- Q3
SELECT CONCAT(
    Ename, ',',
    Job_type
) AS Employee_Job
FROM EMPLOYEE;
```

Results

```
mysql> SELECT CONCAT(
    →      Ename, ',',
    →      Job_type
    →      ) AS Employee_Job
    → FROM EMPLOYEE
    → LIMIT 10;
```

Employee_Job
Gurpreet Singh,Intern
Donielle Tuite,Sales Representative
Andy Beaford,VP Accounting
Sherline Harbord,Audit Manager
Sudipto Ghosh,SDE Manager
Isa Jaques,Legal Manager
Marie Brahms,Systems Engineer
Anmol Gupta,Accounts Manager
Mahala Burtwhistle,Compensation Analyst
Bryna McKenny,Financial Advisor

10 rows in set (0.00 sec)

QUERY - 4

Description

Query to display all the data from the Employee Table. Separate each Column by a comma and name the said column as THE_OUTPUT.

Query

```
-- Q4
SELECT CONCAT(
    Eno, ',',
    Ename, ',',
    Job_type, ',',
    IFNULL(SupervisorEno, ''), ',',
    Hire_date, ',',
    IFNULL(Dno, ''), ',',
    IFNULL(Commission, ''), ',',
    Salary
) AS THE_OUTPUT
FROM EMPLOYEE;
```

Results

```
mysql> SELECT CONCAT(
    →      Eno, ',',
    →      Ename, ',',
    →      Job_type, ',',
    →      IFNULL(SupervisorEno, ''), ',',
    →      Hire_date, ',',
    →      IFNULL(Dno, ''), ',',
    →      IFNULL(Commission, ''), ',',
    →      Salary
    →      ) AS THE_OUTPUT
    → FROM EMPLOYEE
    → LIMIT 10;
```

THE_OUTPUT
125,Gurpreet Singh,Intern,,2008-05-15,,,521.37
146,Donielle Tuite,Sales Representative,520,2016-06-12,90,,171.60
153,Andy Beaford,VP Accounting,778,2000-09-08,40,,502.30
188,Sherline Harbord,Audit Manager,778,1995-08-05,40,,926.42
23,Sudipto Ghosh,SDE Manager,778,1981-11-21,30,,2465.92
232,Isa Jaques,Legal Manager,778,1996-07-23,45,,651.05
243,Marie Brahms,Systems Engineer,23,1983-06-22,40,,876.78
25,Anmol Gupta,Accounts Manager,778,1981-09-11,40,,2865.92
299,Mahala Burtwhistle,Compensation Analyst,89,1990-07-20,95,,602.86
354,Bryna McKenny,Financial Advisor,153,2001-10-11,90,,693.63

10 rows in set (0.00 sec)

QUERY - 5

Description

Query to display the Employee Name and Salary of all the employees earning more than \$2850.

Query

```
-- Q5
SELECT Ename,
       Salary
FROM EMPLOYEE
WHERE Salary > 2850;
```

Results

```
mysql> SELECT Ename,
→          Salary
→ FROM EMPLOYEE
→ WHERE Salary > 2850;
+-----+-----+
| Ename   | Salary |
+-----+-----+
| Anmol Gupta | 2865.92 |
| John Smith  | 5800.23 |
| Rahul Sahay | 2921.37 |
| Tania Chauhan | 2921.37 |
+-----+-----+
4 rows in set (0.00 sec)
```

QUERY - 6

Description

Query to display Employee Name and Department Number for the Employee No = 79.

Query

```
-- Q6
SELECT Ename,
       Dno
FROM EMPLOYEE
WHERE Eno = '79';
```

Results

```
mysql> SELECT Ename,
→          Dno
→ FROM EMPLOYEE
→ WHERE Eno = '79';
+-----+-----+
| Ename   | Dno  |
+-----+-----+
| Rahul Sahay | 30  |
+-----+-----+
1 row in set (0.00 sec)
```

QUERY - 7

Description

Query to display Employee Name and Salary for all employees whose salary is not in the range of \$1500 and \$2850.

Query

```
-- Q7
SELECT Ename,
       Salary
FROM EMPLOYEE
WHERE Salary NOT BETWEEN 1500 AND 2850;
```

Results

```
mysql> SELECT Ename,
→         Salary
→ FROM EMPLOYEE
→ WHERE Salary NOT BETWEEN 1500 AND 2850
→ LIMIT 10;
```

Ename	Salary
Gurpreet Singh	521.37
Donielle Tuite	171.60
Andy Beaford	502.30
Sherline Harbord	926.42
Isa Jaques	651.05
Marie Brahms	876.78
Anmol Gupta	2865.92
Mahala Burtwhistle	602.86
Bryna McKenny	693.63
Ulberto Gosz	381.64

10 rows in set (0.00 sec)

QUERY - 8

Description

Query to display Employee Name and Department No. of all the employees in Dept 10 and Dept 30 in the alphabetical order by name.

Query

```
-- Q8
SELECT Ename,
       Dname
FROM (EMPLOYEE
      NATURAL JOIN DEPARTMENT)
WHERE Dno IN (10, 30)
ORDER BY Ename;
```

Results

```
mysql> SELECT Ename,
→          Dname
→ FROM (EMPLOYEE
→        NATURAL JOIN DEPARTMENT)
→ WHERE Dno IN (10, 30)
→ ORDER BY Ename
→ LIMIT 10;
```

Ename	Dname
Ashil Burney	IT
Brandtr Wildbore	IT
Chandal McBrier	IT
Cornie Munby	IT
Druci Sixsmith	Headquarters
Fran Lening	IT
Gannie Quantrell	IT
Gustav Waring	IT
John Smith	Headquarters
Layton Murrie	IT

10 rows in set (0.00 sec)

QUERY - 9

Description

Query to display Name and Hire Date of every Employee who was hired in 1981.

Query

```
-- Q9
SELECT Ename,
       Hire_date
FROM EMPLOYEE
WHERE Hire_date
      LIKE '1981_____';
```

Results

```
mysql> SELECT Ename,
→       Hire_date
→ FROM EMPLOYEE
→ WHERE Hire_date
→       LIKE '1981_____';
```

Ename	Hire_date
Sudipto Ghosh	1981-11-21
Anmol Gupta	1981-09-11
Fran Lening	1981-05-27

3 rows in set (0.00 sec)

QUERY - 10

Description

Query to display Name and Job of all employees who have not been assigned a supervisor.

Query

```
-- Q10
SELECT Ename,
       Job_type
FROM EMPLOYEE
WHERE SupervisorEno IS NULL;
```

Results

```
mysql> SELECT Ename,
→          Job_type
→ FROM EMPLOYEE
→ WHERE SupervisorEno IS NULL;
```

Ename	Job_type
Gurpreet Singh	Intern
Ulberto Gosz	Office Assistant
Druci Sixsmith	Help Desk Technician
John Smith	Managing Director
Rivy Buzek	Help Desk Technician

5 rows in set (0.00 sec)

QUERY - 11

Description

Query to display the Name, Salary and Commission for all the employees who earn commission.

Query

```
-- Q11
SELECT Ename,
       Salary,
       Commission
FROM EMPLOYEE
WHERE Commission IS NOT NULL;
```

Results

```
mysql> SELECT Ename,
→          Salary,
→          Commission
→ FROM EMPLOYEE
→ WHERE Commission IS NOT NULL;
```

Ename	Salary	Commission
Salmon Gough	998.32	148.80
Lowell Paule	969.66	324.39
Nicholas Comelini	882.53	546.04
Laurence Grosvener	244.37	950.33
Druci Sixsmith	387.43	530.53
Shay Restieaux	500.22	574.68
Marcille Occleshaw	507.10	453.52
Desiri Allott	683.09	239.84
Tania Chauhan	2921.37	235.90
Blake Lewis	921.37	125.45
Nina Fisby	920.84	324.39

11 rows in set (0.00 sec)

QUERY - 12

Description

Sort the data in descending order of Salary and Commission.

Query

```
-- Q12
SELECT *
FROM EMPLOYEE
ORDER BY Salary DESC,
        Commission DESC;
```

Results

```
mysql> SELECT *
      → FROM EMPLOYEE
      → ORDER BY Salary DESC,
      →           Commission DESC
      → LIMIT 10;
```

Eno	Ename	Job_type	SupervisorEno	Hire_date	Dno	Commission	Salary
778	John Smith	Managing Director	NULL	1980-06-12	10	NULL	5800.23
86	Tania Chauhan	Sales Manager	778	1983-08-14	90	235.90	2921.37
79	Rahul Sahay	SDE Intern	23	2004-08-14	30	NULL	2921.37
25	Anmol Gupta	Accounts Manager	778	1981-09-11	40	NULL	2865.92
23	Sudipto Ghosh	SDE Manager	778	1981-11-21	30	NULL	2465.92
492	Salmon Gough	Marketing Assistant	86	2008-12-13	90	148.80	998.32
89	Alicia Jones	Purchase Manager	778	1982-10-26	95	NULL	980.35
516	Lowell Paule	Systems Administrator	23	2008-03-31	30	324.39	969.66
188	Sherline Harbord	Audit Manager	778	1995-08-05	40	NULL	926.42
87	Blake Lewis	Sales Intern	86	2008-05-02	90	125.45	921.37

10 rows in set (0.00 sec)

QUERY - 13

Description

Query to display Name of all the employees where the third letter of their name is 'A'.

Query

```
-- Q13
SELECT Ename
FROM EMPLOYEE
WHERE Ename LIKE '__A%';
```

Results

```
mysql> SELECT Ename
      → FROM EMPLOYEE
      → WHERE Ename LIKE '__A%';
+-----+
| Ename          |
+-----+
| Isa Jaques     |
| Brandtr Wildbore |
| Fran Lening    |
| Chandal McBrier |
| Shay Restieaux  |
| Blake Lewis    |
+-----+
6 rows in set (0.00 sec)
```

QUERY - 14

Description

Query to display Name of all employees either have two 'R's or have two 'A's in their name and are either in Dept No = 30 or their Manger's Employee No = '778'.

Query

```
-- Q14
SELECT Ename
FROM EMPLOYEE
WHERE Ename LIKE '%R%R%'
      OR Ename LIKE '%A%A%'
      OR Dno = 30
      OR SupervisorENo = '778';
```

Results

```
mysql> SELECT Ename
      → FROM EMPLOYEE
      → WHERE Ename LIKE '%R%R%'
      →      OR Ename LIKE '%A%A%'
      →      OR Dno = 30
      →      OR SupervisorENo = '778'
      → LIMIT 10;
```

Ename
Gurpreet Singh
Andy Beaford
Sherline Harbord
Sudipto Ghosh
Isa Jaques
Marie Brahms
Anmol Gupta
Mahala Burtwhistle
Netti Dellenbrok
Skell Woolerton

10 rows in set (0.00 sec)

QUERY - 16

Description

Query to display the Current Date along with the day name.

Query

```
-- Q16  
SELECT DATE(NOW()),  
       DAYNAME(NOW());
```

Results

```
mysql> SELECT DATE(NOW()),  
→      DAYNAME(NOW());  
+-----+-----+  
| DATE(NOW()) | DAYNAME(NOW()) |  
+-----+-----+  
| 2021-01-26 | Tuesday        |  
+-----+-----+  
1 row in set (0.00 sec)
```

QUERY - 17

Description

Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after six months of employment.

Query

```
-- Q17
WITH RECORDS(ENAME, Hire_date, Six_after) AS (
    SELECT ENAME,
           Hire_date,
           DATE_ADD(Hire_date, INTERVAL 6 MONTH)
           AS Six_after
    FROM EMPLOYEE
)
SELECT RECORDS.ENAME,
       RECORDS.Hire_date,
       DATE_ADD(
           RECORDS.Six_after,
           INTERVAL
           IF(
               0 = WEEKDAY(RECORDS.Six_after),
               0 - WEEKDAY(RECORDS.Six_after),
               7 - WEEKDAY(RECORDS.Six_after) + 0
           )
           DAY
       ) AS Salary_review_date
FROM RECORDS;
```

Results

```
mysql> WITH RECORDS(ENAME, Hire_date, Six_after) AS (
  →     SELECT ENAME,
  →           Hire_date,
  →           DATE_ADD(Hire_date, INTERVAL 6 MONTH)
  →           AS Six_after
  →     FROM EMPLOYEE
  → )
  → SELECT RECORDS.ENAME,
  →       RECORDS.Hire_date,
  →       DATE_ADD(
  →           RECORDS.Six_after,
  →           INTERVAL
  →           IF(
  →               0 = WEEKDAY(RECORDS.Six_after),
  →               0 - WEEKDAY(RECORDS.Six_after),
  →               7 - WEEKDAY(RECORDS.Six_after) + 0
  →           )
  →           DAY
  →       ) AS Salary_review_date
  → FROM RECORDS
  → LIMIT 10;
```

Ename	Hire_date	Salary_review_date
Gurpreet Singh	2008-05-15	2008-11-17
Donielle Tuite	2016-06-12	2016-12-12
Andy Beaford	2000-09-08	2001-03-12
Sherline Harbord	1995-08-05	1996-02-05
Sudipto Ghosh	1981-11-21	1982-05-24
Isa Jaques	1996-07-23	1997-01-27
Marie Brahms	1983-06-22	1983-12-26
Anmol Gupta	1981-09-11	1982-03-15
Mahala Burtwhistle	1990-07-20	1991-01-21
Bryna McKenny	2001-10-11	2002-04-15

10 rows in set (0.00 sec)

QUERY - 18

Description

Query to display Name and calculate the number of months between today and the date on which employee was hired of department 'Purchase'.

Query

```
-- Q18
SELECT Ename,
       TIMESTAMPDIFF(MONTH, Hire_date, NOW())
FROM (EMPLOYEE
      NATURAL JOIN DEPARTMENT)
WHERE Dname = 'Purchase';
```

Results

```
mysql> SELECT Ename,
→          TIMESTAMPDIFF(MONTH, Hire_date, NOW())
→ FROM (EMPLOYEE
→        NATURAL JOIN DEPARTMENT)
→ WHERE Dname = 'Purchase';
```

Ename	TIMESTAMPDIFF(MONTH, Hire_date, NOW())
Mahala Burtwhistle	366
Oneida Hicklingbottom	178
Desiri Allott	278
Alicia Jones	459

4 rows in set (0.00 sec)

QUERY - 19

Description

Query to display the following for each employee <ENAME> earns <Salary> monthly but wants < 3 * Current Salary >. Label the Column as Dream Salary.

Query

```
-- Q19
SELECT CONCAT(
    Ename, ' earns $',
    Salary, ' monthly ',
    'but wants $', 3 * Salary
)
    AS "Dream Salary"
FROM EMPLOYEE;
```

Results

```
mysql> SELECT CONCAT(
    →          Ename, ' earns $',
    →          Salary, ' monthly ',
    →          'but wants $', 3 * Salary
    →        )
    →        AS "Dream Salary"
    → FROM EMPLOYEE
    → LIMIT 10;
```

Dream Salary
Gurpreet Singh earns \$521.37 monthly but wants \$1564.11
Donielle Tuite earns \$171.60 monthly but wants \$514.80
Andy Beaford earns \$502.30 monthly but wants \$1506.90
Sherline Harbord earns \$926.42 monthly but wants \$2779.26
Sudipto Ghosh earns \$2465.92 monthly but wants \$7397.76
Isa Jaques earns \$651.05 monthly but wants \$1953.15
Marie Brahms earns \$876.78 monthly but wants \$2630.34
Anmol Gupta earns \$2865.92 monthly but wants \$8597.76
Mahala Burtwhistle earns \$602.86 monthly but wants \$1808.58
Bryna McKenny earns \$693.63 monthly but wants \$2080.89

10 rows in set (0.00 sec)

QUERY -20

Description

Query to display Name with the 1st letter capitalized and all other letter lower case and length of their name of all the employees whose name starts with 'J', 'A' and 'M'.

Query

```
-- Q20
SELECT CONCAT(
    UPPER(SUBSTR(Ename, 1, 1)),
    LOWER(SUBSTR(Ename, 2))
)
    AS "Name",
    LENGTH(Ename)
FROM EMPLOYEE
WHERE Ename LIKE 'J%'
    OR Ename LIKE 'A%'
    OR Ename LIKE 'M%';
```

Results

```
mysql> SELECT CONCAT(
→         UPPER(SUBSTR(Ename, 1, 1)),
→         LOWER(SUBSTR(Ename, 2))
→     )
→     AS "Name",
→     LENGTH(Ename)
→ FROM EMPLOYEE
→ WHERE Ename LIKE 'J%'
→     OR Ename LIKE 'A%'
→     OR Ename LIKE 'M%';
```

Name	LENGTH(Ename)
Andy beaford	12
Marie brahms	12
Anmol gupta	11
Mahala burtwhistle	18
Martha annies	13
John smith	10
Marcille occleshaw	18
Ashil burney	12
Alicia jones	12
Mag giacomio	11

10 rows in set (0.00 sec)