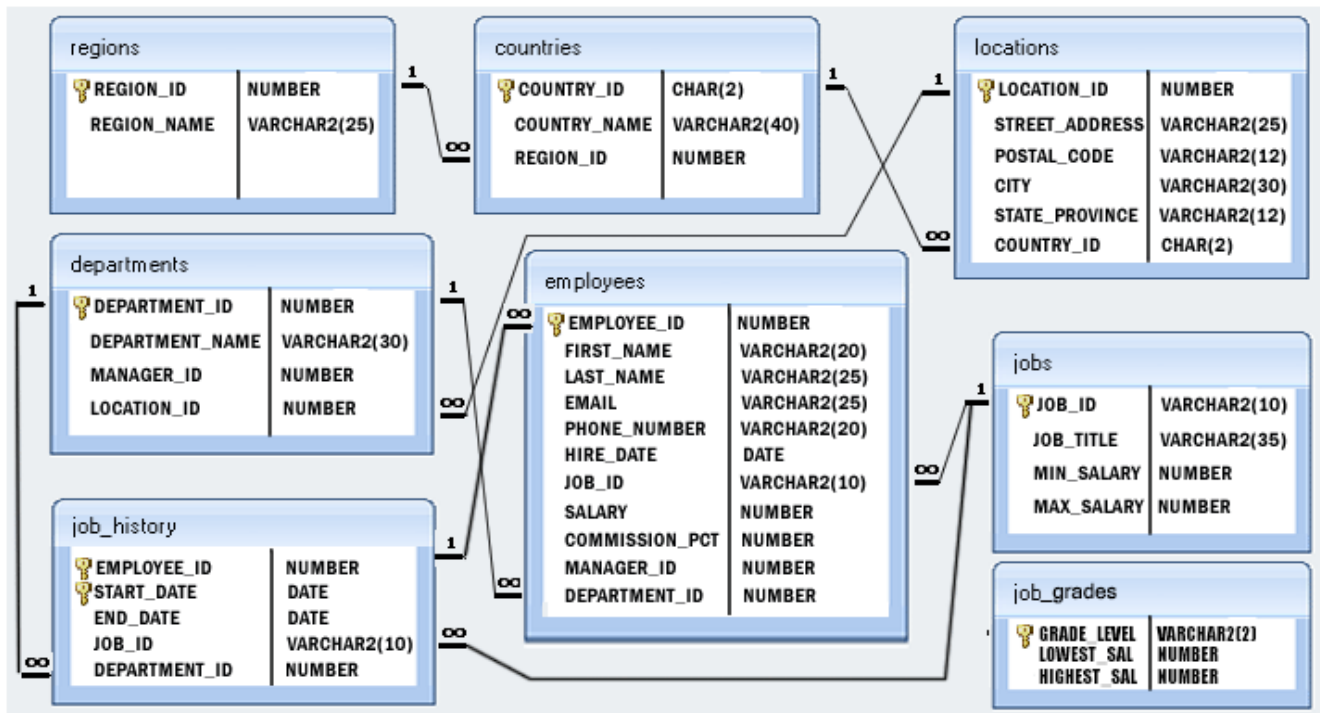# Lab Assignment 4

Please see the database schema of **hr** database. First, create the database and create all the tables and insert the record in each table.

Creation of Table countries:

```
CREATE TABLE IF NOT EXISTS `countries` (
 `COUNTRY_ID` varchar(2) NOT NULL,
 `COUNTRY_NAME` varchar(40) DEFAULT NULL,
 `REGION_ID` decimal(10,0) DEFAULT NULL,
 PRIMARY KEY (`COUNTRY_ID`),
 KEY `COUNTR_REG_FK` (`REGION_ID`)
) ;
```

Insertion of elements into Table countries:

INSERT INTO `countries` (`COUNTRY_ID`, `COUNTRY_NAME`, `REGION_ID`) VALUES

('AR', 'Argentina', '2'),

('AU', 'Australia', '3'),

('BE', 'Belgium', '1'),

('BR', 'Brazil', '2'),

('CA', 'Canada', '2'),

('CH', 'Switzerland', '1'),

('CN', 'China', '3'),

('DE', 'Germany', '1'),

('DK', 'Denmark', '1'),

('EG', 'Egypt', '4'),

('FR', 'France', '1'),

('HK', 'HongKong', '3'),

('IL', 'Israel', '4'),

('IN', 'India', '3'),

('IT', 'Italy', '1'),

('JP', 'Japan', '3'),

('KW', 'Kuwait', '4'),

('MX', 'Mexico', '2'),

('NG', 'Nigeria', '4'),

('NL', 'Netherlands', '1'),

('SG', 'Singapore', '3'),

('UK', 'United Kingdom', '1'),

('US', 'United States of America', '2'),

('ZM', 'Zambia', '4'),

('ZW', 'Zimbabwe', '4');

Creation of Table departments:

```
CREATE TABLE IF NOT EXISTS `departments` (
  `DEPARTMENT_ID` decimal(4,0) NOT NULL DEFAULT '0',
  `DEPARTMENT_NAME` varchar(30) NOT NULL,
  `MANAGER_ID` decimal(6,0) DEFAULT NULL,
  `LOCATION_ID` decimal(4,0) DEFAULT NULL,
  PRIMARY KEY (`DEPARTMENT_ID`),
  KEY `DEPT_MGR_FK` (`MANAGER_ID`),
  KEY `DEPT_LOCATION_IX` (`LOCATION_ID`)
);
```

Insertion into of Table departments:

```
INSERT INTO `departments` (`DEPARTMENT_ID`, `DEPARTMENT_NAME`, `MANAGER_ID`,
`LOCATION_ID`) VALUES
('10', 'Administration', '200', '1700'),
('20', 'Marketing', '201', '1800'),
('30', 'Purchasing', '114', '1700'),
('40', 'Human Resources', '203', '2400'),
('50', 'Shipping', '121', '1500'),
('60', 'IT', '103', '1400'),
('70', 'Public Relations', '204', '2700'),
('80', 'Sales', '145', '2500'),
('90', 'Executive', '100', '1700'),
('100', 'Finance', '108', '1700'),
('110', 'Accounting', '205', '1700'),
('120', 'Treasury', '0', '1700'),
('130', 'Corporate Tax', '0', '1700'),
```

('140', 'Control And Credit', '0', '1700'),

('150', 'Shareholder Services', '0', '1700'),

('160', 'Benefits', '0', '1700'),

('170', 'Manufacturing', '0', '1700'),

('180', 'Construction', '0', '1700'),

('190', 'Contracting', '0', '1700'),

('200', 'Operations', '0', '1700'),

('210', 'IT Support', '0', '1700'),

('220', 'NOC', '0', '1700'),

('230', 'IT Helpdesk', '0', '1700'),

('240', 'Government Sales', '0', '1700'),

('250', 'Retail Sales', '0', '1700'),

('260', 'Recruiting', '0', '1700'),

('270', 'Payroll', '0', '1700');

Creation of Table employees:

```
CREATE TABLE IF NOT EXISTS `employees` (
  `EMPLOYEE_ID` decimal(6,0) NOT NULL DEFAULT '0',
  `FIRST_NAME` varchar(20) DEFAULT NULL,
  `LAST_NAME` varchar(25) NOT NULL,
  `EMAIL` varchar(25) NOT NULL,
  `PHONE_NUMBER` varchar(20) DEFAULT NULL,
  `HIRE_DATE` date NOT NULL,
  `JOB_ID` varchar(10) NOT NULL,
  `SALARY` decimal(8,2) DEFAULT NULL,
  `COMMISSION_PCT` decimal(2,2) DEFAULT NULL,
  `MANAGER_ID` decimal(6,0) DEFAULT NULL,
```

`DEPARTMENT_ID` decimal(4,0) DEFAULT NULL,

PRIMARY KEY (`EMPLOYEE_ID`),

UNIQUE KEY `EMP_EMAIL_UK` (`EMAIL`),

KEY `EMP_DEPARTMENT_IX` (`DEPARTMENT_ID`),

KEY `EMP_JOB_IX` (`JOB_ID`),

KEY `EMP_MANAGER_IX` (`MANAGER_ID`),

KEY `EMP_NAME_IX` (`LAST_NAME`,`FIRST_NAME`)

);

<u>Insertion into Table employees:</u>

INSERT INTO `employees` (`EMPLOYEE_ID`, `FIRST_NAME`, `LAST_NAME`, `EMAIL`, `PHONE_NUMBER`, `HIRE_DATE`, `JOB_ID`, `SALARY`, `COMMISSION_PCT`, `MANAGER_ID`, `DEPARTMENT_ID`) VALUES('100', 'Steven', 'King', 'SKING', '515.123.4567', '1987-06-17', 'AD_PRES', '24000.00', '0.00', '0', '90'),('101', 'Neena', 'Kochhar', 'NKOCHHAR', '515.123.4568', '1987-06-18', 'AD_VP', '17000.00', '0.00', '100', '90'),('102', 'Lex', 'De Haan', 'LDEHAAN', '515.123.4569', '1987-06-19', 'AD_VP', '17000.00', '0.00', '100', '90'),('103', 'Alexander', 'Hunold', 'AHUNOLD', '590.423.4567', '1987-06-20', 'IT_PROG', '9000.00', '0.00', '102', '60'),('104', 'Bruce', 'Ernst', 'BERNST', '590.423.4568', '1987-06-21', 'IT_PROG', '6000.00', '0.00', '103', '60'),('105', 'David', 'Austin', 'DAUSTIN', '590.423.4569', '1987-06-22', 'IT_PROG', '4800.00', '0.00', '103', '60'),('106', 'Valli', 'Pataballa', 'VPATABAL', '590.423.4560', '1987-06-23', 'IT_PROG', '4800.00', '0.00', '103', '60'),('107', 'Diana', 'Lorentz', 'DLORENTZ', '590.423.5567', '1987-06-24', 'IT_PROG', '4200.00', '0.00', '103', '60'),('108', 'Nancy', 'Greenberg', 'NGREENBE', '515.124.4569', '1987-06-25', 'FI_MGR', '12000.00', '0.00', '101', '100'),('109', 'Daniel', 'Faviet', 'DFAVIET', '515.124.4169', '1987-06-26', 'FI_ACCOUNT', '9000.00', '0.00', '108', '100'),('110', 'John', 'Chen', 'JCHEN', '515.124.4269', '1987-06-27', 'FI_ACCOUNT', '8200.00', '0.00', '108', '100'),('111', 'Ismael', 'Sciarra', 'ISCIARRA', '515.124.4369', '1987-06-28', 'FI_ACCOUNT', '7700.00', '0.00', '108', '100'),('112', 'Jose Manuel', 'Urman', 'JMURMAN', '515.124.4469', '1987-06-29', 'FI_ACCOUNT', '7800.00', '0.00', '108', '100'),('113', 'Luis', 'Popp', 'LPOPP', '515.124.4567', '1987-06-30', 'FI_ACCOUNT', '6900.00', '0.00', '108', '100'),('114', 'Den', 'Raphaely', 'DRAPHEAL', '515.127.4561', '1987-07-01', 'PU_MAN', '11000.00', '0.00', '100', '30'),('115', 'Alexander', 'Khoo', 'AKHOO', '515.127.4562', '1987-07-02', 'PU_CLERK', '3100.00', '0.00', '114', '30'),('116', 'Shelli', 'Baida', 'SBAIDA', '515.127.4563', '1987-07-03', 'PU_CLERK', '2900.00', '0.00', '114', '30'),('117', 'Sigal', 'Tobias', 'STOBIAS', '515.127.4564', '1987-07-04', 'PU_CLERK', '2800.00', '0.00', '114', '30'),('118', 'Guy', 'Himuro', 'GHIMURO', '515.127.4565', '1987-07-05', 'PU_CLERK', '2600.00', '0.00', '114', '30'),('119', 'Karen', 'Colmenares', 'KCOLMENA', '515.127.4566', '1987-07-06', 'PU_CLERK', '2500.00', '0.00', '114', '30'),('120', 'Matthew', 'Weiss', 'MWEISS',

'650.123.1234', '1987-07-07', 'ST_MAN', '8000.00', '0.00', '100', '50'),('121', 'Adam', 'Fripp', 'AFRIPP', '650.123.2234', '1987-07-08', 'ST_MAN', '8200.00', '0.00', '100', '50'),('122', 'Payam', 'Kaufling', 'PKAUFLIN', '650.123.3234', '1987-07-09', 'ST_MAN', '7900.00', '0.00', '100', '50'),('123', 'Shanta', 'Vollman', 'SVOLLMAN', '650.123.4234', '1987-07-10', 'ST_MAN', '6500.00', '0.00', '100', '50'),('124', 'Kevin', 'Mourgos', 'KMOURGOS', '650.123.5234', '1987-07-11', 'ST_MAN', '5800.00', '0.00', '100', '50'),('125', 'Julia', 'Nayer', 'JNAYER', '650.124.1214', '1987-07-12', 'ST_CLERK', '3200.00', '0.00', '120', '50'),('126', 'Irene', 'Mikkilineni', 'IMIKKILI', '650.124.1224', '1987-07-13', 'ST_CLERK', '2700.00', '0.00', '120', '50'),('127', 'James', 'Landry', 'JLANDRY', '650.124.1334', '1987-07-14', 'ST_CLERK', '2400.00', '0.00', '120', '50'),('128', 'Steven', 'Markle', 'SMARKLE', '650.124.1434', '1987-07-15', 'ST_CLERK', '2200.00', '0.00', '120', '50'),('129', 'Laura', 'Bissot', 'LBISSOT', '650.124.5234', '1987-07-16', 'ST_CLERK', '3300.00', '0.00', '121', '50'),('130', 'Mozhe', 'Atkinson', 'MATKINSO', '650.124.6234', '1987-07-17', 'ST_CLERK', '2800.00', '0.00', '121', '50'),('131', 'James', 'Marlow', 'JAMRLOW', '650.124.7234', '1987-07-18', 'ST_CLERK', '2500.00', '0.00', '121', '50'),('132', 'TJ', 'Olson', 'TJOLSON', '650.124.8234', '1987-07-19', 'ST_CLERK', '2100.00', '0.00', '121', '50'),('133', 'Jason', 'Mallin', 'JMALLIN', '650.127.1934', '1987-07-20', 'ST_CLERK', '3300.00', '0.00', '122', '50'),('134', 'Michael', 'Rogers', 'MROGERS', '650.127.1834', '1987-07-21', 'ST_CLERK', '2900.00', '0.00', '122', '50'),('135', 'Ki', 'Gee', 'KGEE', '650.127.1734', '1987-07-22', 'ST_CLERK', '2400.00', '0.00', '122', '50'),('136', 'Hazel', 'Philtanker', 'HPHILTAN', '650.127.1634', '1987-07-23', 'ST_CLERK', '2200.00', '0.00', '122', '50'),('137', 'Renske', 'Ladwig', 'RLADWIG', '650.121.1234', '1987-07-24', 'ST_CLERK', '3600.00', '0.00', '123', '50'),('138', 'Stephen', 'Stiles', 'SSTILES', '650.121.2034', '1987-07-25', 'ST_CLERK', '3200.00', '0.00', '123', '50'),('139', 'John', 'Seo', 'JSEO', '650.121.2019', '1987-07-26', 'ST_CLERK', '2700.00', '0.00', '123', '50'),('140', 'Joshua', 'Patel', 'JPATEL', '650.121.1834', '1987-07-27', 'ST_CLERK', '2500.00', '0.00', '123', '50'),('141', 'Trenna', 'Rajs', 'TRAJS', '650.121.8009', '1987-07-28', 'ST_CLERK', '3500.00', '0.00', '124', '50'),('142', 'Curtis', 'Davies', 'CDAVIES', '650.121.2994', '1987-07-29', 'ST_CLERK', '3100.00', '0.00', '124', '50'),('143', 'Randall', 'Matos', 'RMATOS', '650.121.2874', '1987-07-30', 'ST_CLERK', '2600.00', '0.00', '124', '50'),('144', 'Peter', 'Vargas', 'PVARGAS', '650.121.2004', '1987-07-31', 'ST_CLERK', '2500.00', '0.00', '124', '50'),('145', 'John', 'Russell', 'JRUSSEL', '011.44.1344.429268', '1987-08-01', 'SA_MAN', '14000.00', '0.40', '100', '80'),('146', 'Karen', 'Partners', 'KPARTNER', '011.44.1344.467268', '1987-08-02', 'SA_MAN', '13500.00', '0.30', '100', '80'),('147', 'Alberto', 'Errazuriz', 'AERRAZUR', '011.44.1344.429278', '1987-08-03', 'SA_MAN', '12000.00', '0.30', '100', '80'),('148', 'Gerald', 'Cambrault', 'GCAMBRAU', '011.44.1344.619268', '1987-08-04', 'SA_MAN', '11000.00', '0.30', '100', '80'),('149', 'Eleni', 'Zlotkey', 'EZLOTKEY', '011.44.1344.429018', '1987-08-05', 'SA_MAN', '10500.00', '0.20', '100', '80'),('150', 'Peter', 'Tucker', 'PTUCKER', '011.44.1344.129268', '1987-08-06', 'SA_REP', '10000.00', '0.30', '145', '80'),('151', 'David', 'Bernstein', 'DBERNSTE', '011.44.1344.345268', '1987-08-07', 'SA_REP', '9500.00', '0.25', '145', '80'),('152', 'Peter', 'Hall', 'PHALL', '011.44.1344.478968', '1987-08-08', 'SA_REP', '9000.00', '0.25', '145', '80'),('153', 'Christopher', 'Olsen', 'COLSEN', '011.44.1344.498718', '1987-08-09', 'SA_REP', '8000.00', '0.20', '145', '80'),('154', 'Nanette', 'Cambrault', 'NCAMBRAU', '011.44.1344.987668', '1987-08-10', 'SA_REP', '7500.00', '0.20', '145', '80'),('155', 'Oliver', 'Tuvault', 'OTUVAULT', '011.44.1344.486508', '1987-08-11', 'SA_REP', '7000.00', '0.15', '145', '80'),('156', 'Janette',

'King', 'JKING', '011.44.1345.429268', '1987-08-12', 'SA_REP', '10000.00', '0.35', '146', '80'),('157', 'Patrick', 'Sully', 'PSULLY', '011.44.1345.929268', '1987-08-13', 'SA_REP', '9500.00', '0.35', '146', '80'),('158', 'Allan', 'McEwen', 'AMCEWEN', '011.44.1345.829268', '1987-08-14', 'SA_REP', '9000.00', '0.35', '146', '80'),('159', 'Lindsey', 'Smith', 'LSMITH', '011.44.1345.729268', '1987-08-15', 'SA_REP', '8000.00', '0.30', '146', '80'),('160', 'Louise', 'Doran', 'LDORAN', '011.44.1345.629268', '1987-08-16', 'SA_REP', '7500.00', '0.30', '146', '80'),('161', 'Sarath', 'Sewall', 'SSEWALL', '011.44.1345.529268', '1987-08-17', 'SA_REP', '7000.00', '0.25', '146', '80'),('162', 'Clara', 'Vishney', 'CVISHNEY', '011.44.1346.129268', '1987-08-18', 'SA_REP', '10500.00', '0.25', '147', '80'),('163', 'Danielle', 'Greene', 'DGREENE', '011.44.1346.229268', '1987-08-19', 'SA_REP', '9500.00', '0.15', '147', '80'),('164', 'Mattea', 'Marvins', 'MMARVINS', '011.44.1346.329268', '1987-08-20', 'SA_REP', '7200.00', '0.10', '147', '80'),('165', 'David', 'Lee', 'DLEE', '011.44.1346.529268', '1987-08-21', 'SA_REP', '6800.00', '0.10', '147', '80'),('166', 'Sundar', 'Ande', 'SANDE', '011.44.1346.629268', '1987-08-22', 'SA_REP', '6400.00', '0.10', '147', '80'),('167', 'Amit', 'Banda', 'ABANDA', '011.44.1346.729268', '1987-08-23', 'SA_REP', '6200.00', '0.10', '147', '80'),('168', 'Lisa', 'Ozer', 'LOZER', '011.44.1343.929268', '1987-08-24', 'SA_REP', '11500.00', '0.25', '148', '80'),('169', 'Harrison', 'Bloom', 'HBLOOM', '011.44.1343.829268', '1987-08-25', 'SA_REP', '10000.00', '0.20', '148', '80'),('170', 'Tayler', 'Fox', 'TFOX', '011.44.1343.729268', '1987-08-26', 'SA_REP', '9600.00', '0.20', '148', '80'),('171', 'William', 'Smith', 'WSMITH', '011.44.1343.629268', '1987-08-27', 'SA_REP', '7400.00', '0.15', '148', '80'),('172', 'Elizabeth', 'Bates', 'EBATES', '011.44.1343.529268', '1987-08-28', 'SA_REP', '7300.00', '0.15', '148', '80'),('173', 'Sundita', 'Kumar', 'SKUMAR', '011.44.1343.329268', '1987-08-29', 'SA_REP', '6100.00', '0.10', '148', '80'),('174', 'Ellen', 'Abel', 'EABEL', '011.44.1644.429267', '1987-08-30', 'SA_REP', '11000.00', '0.30', '149', '80'),('175', 'Alyssa', 'Hutton', 'AHUTTON', '011.44.1644.429266', '1987-08-31', 'SA_REP', '8800.00', '0.25', '149', '80'),('176', 'Jonathon', 'Taylor', 'JTAYLOR', '011.44.1644.429265', '1987-09-01', 'SA_REP', '8600.00', '0.20', '149', '80'),('177', 'Jack', 'Livingston', 'JLIVINGS', '011.44.1644.429264', '1987-09-02', 'SA_REP', '8400.00', '0.20', '149', '80'),('178', 'Kimberely', 'Grant', 'KGRANT', '011.44.1644.429263', '1987-09-03', 'SA_REP', '7000.00', '0.15', '149', '0'),('179', 'Charles', 'Johnson', 'CJOHNSON', '011.44.1644.429262', '1987-09-04', 'SA_REP', '6200.00', '0.10', '149', '80'),('180', 'Winston', 'Taylor', 'WTAYLOR', '650.507.9876', '1987-09-05', 'SH_CLERK', '3200.00', '0.00', '120', '50'),('181', 'Jean', 'Fleaur', 'JFLEAUR', '650.507.9877', '1987-09-06', 'SH_CLERK', '3100.00', '0.00', '120', '50'),('182', 'Martha', 'Sullivan', 'MSULLIVA', '650.507.9878', '1987-09-07', 'SH_CLERK', '2500.00', '0.00', '120', '50'),('183', 'Girard', 'Geoni', 'GGEONI', '650.507.9879', '1987-09-08', 'SH_CLERK', '2800.00', '0.00', '120', '50'),('184', 'Nandita', 'Sarchand', 'NSARCHAN', '650.509.1876', '1987-09-09', 'SH_CLERK', '4200.00', '0.00', '121', '50'),('185', 'Alexis', 'Bull', 'ABULL', '650.509.2876', '1987-09-10', 'SH_CLERK', '4100.00', '0.00', '121', '50'),('186', 'Julia', 'Dellinger', 'JDELLING', '650.509.3876', '1987-09-11', 'SH_CLERK', '3400.00', '0.00', '121', '50'),('187', 'Anthony', 'Cabrio', 'ACABRIO', '650.509.4876', '1987-09-12', 'SH_CLERK', '3000.00', '0.00', '121', '50'),('188', 'Kelly', 'Chung', 'KCHUNG', '650.505.1876', '1987-09-13', 'SH_CLERK', '3800.00', '0.00', '122', '50'),('189', 'Jennifer', 'Dilly', 'JDILLY', '650.505.2876', '1987-09-14', 'SH_CLERK', '3600.00', '0.00', '122', '50'),('190', 'Timothy', 'Gates', 'TGATES', '650.505.3876', '1987-09-15', 'SH_CLERK', '2900.00', '0.00', '122', '50'),('191', 'Randall', 'Perkins', 'RPERKINS', '650.505.4876', '1987-09-16', 'SH_CLERK',

'2500.00', '0.00', '122', '50'),('192', 'Sarah', 'Bell', 'SBELL', '650.501.1876', '1987-09-17', 'SH_CLERK', '4000.00', '0.00', '123', '50'),('193', 'Britney', 'Everett', 'BEVERETT', '650.501.2876', '1987-09-18', 'SH_CLERK', '3900.00', '0.00', '123', '50'),('194', 'Samuel', 'McCain', 'SMCCAIN', '650.501.3876', '1987-09-19', 'SH_CLERK', '3200.00', '0.00', '123', '50'),('195', 'Vance', 'Jones', 'VJONES', '650.501.4876', '1987-09-20', 'SH_CLERK', '2800.00', '0.00', '123', '50'),('196', 'Alana', 'Walsh', 'AWALSH', '650.507.9811', '1987-09-21', 'SH_CLERK', '3100.00', '0.00', '124', '50'),('197', 'Kevin', 'Feeney', 'KFEENEY', '650.507.9822', '1987-09-22', 'SH_CLERK', '3000.00', '0.00', '124', '50'),('198', 'Donald', 'OConnell', 'DOCONNEL', '650.507.9833', '1987-09-23', 'SH_CLERK', '2600.00', '0.00', '124', '50'),('199', 'Douglas', 'Grant', 'DGRANT', '650.507.9844', '1987-09-24', 'SH_CLERK', '2600.00', '0.00', '124', '50'),('200', 'Jennifer', 'Whalen', 'JWHALEN', '515.123.4444', '1987-09-25', 'AD_ASST', '4400.00', '0.00', '101', '10'),('201', 'Michael', 'Hartstein', 'MHARTSTE', '515.123.5555', '1987-09-26', 'MK_MAN', '13000.00', '0.00', '100', '20'),('202', 'Pat', 'Fay', 'PFAY', '603.123.6666', '1987-09-27', 'MK_REP', '6000.00', '0.00', '201', '20'),('203', 'Susan', 'Mavris', 'SMAVRIS', '515.123.7777', '1987-09-28', 'HR_REP', '6500.00', '0.00', '101', '40'),('204', 'Hermann', 'Baer', 'HBAER', '515.123.8888', '1987-09-29', 'PR_REP', '10000.00', '0.00', '101', '70'),('205', 'Shelley', 'Higgins', 'SHIGGINS', '515.123.8080', '1987-09-30', 'AC_MGR', '12000.00', '0.00', '101', '110'),('206', 'William', 'Gietz', 'WGIETZ', '515.123.8181', '1987-10-01', 'AC_ACCOUNT', '8300.00', '0.00', '205', '110');

Creation of Table job_history:

CREATE TABLE IF NOT EXISTS `job_history` (

  `EMPLOYEE_ID` decimal(6,0) NOT NULL,

  `START_DATE` date NOT NULL,

  `END_DATE` date NOT NULL,

  `JOB_ID` varchar(10) NOT NULL,

  `DEPARTMENT_ID` decimal(4,0) DEFAULT NULL,

  PRIMARY KEY (`EMPLOYEE_ID`,`START_DATE`),

  KEY `JHIST_DEPARTMENT_IX` (`DEPARTMENT_ID`),

  KEY `JHIST_EMPLOYEE_IX` (`EMPLOYEE_ID`),

  KEY `JHIST_JOB_IX` (`JOB_ID`)

);

Insertion into Table countries:

```
INSERT INTO `job_history` (`EMPLOYEE_ID`, `START_DATE`, `END_DATE`, `JOB_ID`,
`DEPARTMENT_ID`) VALUES

('102', '1993-01-13', '1998-07-24', 'IT_PROG', '60'),

('101', '1989-09-21', '1993-10-27', 'AC_ACCOUNT', '110'),

('101', '1993-10-28', '1997-03-15', 'AC_MGR', '110'),

('201', '1996-02-17', '1999-12-19', 'MK_REP', '20'),

('114', '1998-03-24', '1999-12-31', 'ST_CLERK', '50'),

('122', '1999-01-01', '1999-12-31', 'ST_CLERK', '50'),

('200', '1987-09-17', '1993-06-17', 'AD_ASST', '90'),

('176', '1998-03-24', '1998-12-31', 'SA_REP', '80'),

('176', '1999-01-01', '1999-12-31', 'SA_MAN', '80'),

('200', '1994-07-01', '1998-12-31', 'AC_ACCOUNT', '90'),

('0', '0000-00-00', '0000-00-00', '', '0');
```

Creation of Table jobs:

```
CREATE TABLE IF NOT EXISTS `jobs` (
  `JOB_ID` varchar(10) NOT NULL DEFAULT '',
  `JOB_TITLE` varchar(35) NOT NULL,
  `MIN_SALARY` decimal(6,0) DEFAULT NULL,
  `MAX_SALARY` decimal(6,0) DEFAULT NULL,
  PRIMARY KEY (`JOB_ID`)
);
```

Insertion into Table jobs:

```
INSERT INTO `jobs` (`JOB_ID`, `JOB_TITLE`, `MIN_SALARY`, `MAX_SALARY`) VALUES

('AD_PRES', 'President', '20000', '40000'),
```

('AD_VP', 'Administration Vice President', '15000', '30000'),

('AD_ASST', 'Administration Assistant', '3000', '6000'),

('FI_MGR', 'Finance Manager', '8200', '16000'),

('FI_ACCOUNT', 'Accountant', '4200', '9000'),

('AC_MGR', 'Accounting Manager', '8200', '16000'),

('AC_ACCOUNT', 'Public Accountant', '4200', '9000'),

('SA_MAN', 'Sales Manager', '10000', '20000'),

('SA_REP', 'Sales Representative', '6000', '12000'),

('PU_MAN', 'Purchasing Manager', '8000', '15000'),

('PU_CLERK', 'Purchasing Clerk', '2500', '5500'),

('ST_MAN', 'Stock Manager', '5500', '8500'),

('ST_CLERK', 'Stock Clerk', '2000', '5000'),

('SH_CLERK', 'Shipping Clerk', '2500', '5500'),

('IT_PROG', 'Programmer', '4000', '10000'),

('MK_MAN', 'Marketing Manager', '9000', '15000'),

('MK_REP', 'Marketing Representative', '4000', '9000'),

('HR_REP', 'Human Resources Representative', '4000', '9000'),

('PR_REP', 'Public Relations Representative', '4500', '10500');

Creation of Table locations:

CREATE TABLE IF NOT EXISTS `locations` (

  `LOCATION_ID` decimal(4,0) NOT NULL DEFAULT '0',

  `STREET_ADDRESS` varchar(40) DEFAULT NULL,

  `POSTAL_CODE` varchar(12) DEFAULT NULL,

  `CITY` varchar(30) NOT NULL,

  `STATE_PROVINCE` varchar(25) DEFAULT NULL,

  `COUNTRY_ID` varchar(2) DEFAULT NULL,

  PRIMARY KEY (`LOCATION_ID`),

```
  KEY `LOC_CITY_IX` (`CITY`),

  KEY `LOC_COUNTRY_IX` (`COUNTRY_ID`),

  KEY `LOC_STATE_PROVINCE_IX` (`STATE_PROVINCE`)

);
```

Insertion into Table locations:

```
INSERT INTO `locations` (`LOCATION_ID`, `STREET_ADDRESS`, `POSTAL_CODE`, `CITY`,
`STATE_PROVINCE`, `COUNTRY_ID`) VALUES

('1000', '1297 Via Cola di Rie', '989', 'Roma', '', 'IT'),

('1100', '93091 Calle della Testa', '10934', 'Venice', '', 'IT'),

('1200', '2017 Shinjuku-ku', '1689', 'Tokyo', 'Tokyo Prefecture', 'JP'),

('1300', '9450 Kamiya-cho', '6823', 'Hiroshima', '', 'JP'),

('1400', '2014 Jabberwocky Rd', '26192', 'Southlake', 'Texas', 'US'),

('1500', '2011 Interiors Blvd', '99236', 'South San Francisco', 'California', 'US'),

('1600', '2007 Zagora St', '50090', 'South Brunswick', 'New Jersey', 'US'),

('1700', '2004 Charade Rd', '98199', 'Seattle', 'Washington', 'US'),

('1800', '147 Spadina Ave', 'M5V 2L7', 'Toronto', 'Ontario', 'CA'),

('1900', '6092 Boxwood St', 'YSW 9T2', 'Whitehorse', 'Yukon', 'CA'),

('2000', '40-5-12 Laogianggen', '190518', 'Beijing', '', 'CN'),

('2100', '1298 Vileparle (E)', '490231', 'Bombay', 'Maharashtra', 'IN'),

('2200', '12-98 Victoria Street', '2901', 'Sydney', 'New South Wales', 'AU'),

('2300', '198 Clementi North', '540198', 'Singapore', '', 'SG'),

('2400', '8204 Arthur St', '', 'London', '', 'UK'),

('2500', '"Magdalen Centre', ' The Oxford ', 'OX9 9ZB', 'Oxford', 'Ox'),

('2600', '9702 Chester Road', '9629850293', 'Stretford', 'Manchester', 'UK'),

('2700', 'Schwanthalerstr. 7031', '80925', 'Munich', 'Bavaria', 'DE'),

('2800', 'Rua Frei Caneca 1360', '01307-002', 'Sao Paulo', 'Sao Paulo', 'BR'),

('2900', '20 Rue des Corps-Saints', '1730', 'Geneva', 'Geneve', 'CH'),

('3000', 'Murtenstrasse 921', '3095', 'Bern', 'BE', 'CH'),

('3100', 'Pieter Breughelstraat 837', '3029SK', 'Utrecht', 'Utrecht', 'NL'),
```

('3200', 'Mariano Escobedo 9991', '11932', 'Mexico City', '"Distrito Federal', '"');

Creation of Table regions:

CREATE TABLE IF NOT EXISTS `regions` (`REGION_ID` decimal(5,0) NOT NULL, `REGION_NAME` varchar(25) DEFAULT NULL, PRIMARY KEY (`REGION_ID`), UNIQUE KEY `sss` (`REGION_NAME`));

Insertion into Table regions:

INSERT INTO `regions` (`REGION_ID`, `REGION_NAME`) VALUES

('1', 'Europe\r'),

('2', 'Americas\r'),

('3', 'Asia\r'),

('4', 'Middle East and Africa\r');

QUESTIONS:

1. Write a SQL statement to get all information about the employees but limiting to only 5.

2. Write a SQL statement to change salary of employee to 8000 whose ID is 105, if the existing salary is less than 5000.

3. Write a SQL statement to change job ID of employee which ID is 118, to SH_CLERK if the employee belongs to department, which ID is 30 and the existing job ID does not start with SH.

4. Write a SQL statement to increase the salary of employees under the department 40, 90 and 110 according to the company rules that, salary will be increased by 25% for the department 40, 15% for department 90 and 10% for the department 110 and the rest of the departments will remain same.

5. Write a query to display the names (first_name, last_name) using alias name "First Name", "Last Name".

6. Write a query to get unique department ID from employee table.

7. Write a query to get the details of all employees according to first name in descending order.

8. Write a query to get the names (first_name, last_name), salary, PF of all the employees (PF is calculated as 15% of salary).

9. Write a query to get the employee ID, names (first_name, last_name), salary in ascending order of salary.

10. Write a query to get the total salaries payable to employees.

11. Write a query to get the maximum and minimum salary from employees table.

12. Write a query to get the average salary and number of employees in the employees table.

13. Write a query to get the number of employees working with the company.

14. Write a query to get the number of jobs available in the employees table.

15. Write a query get all first name from employees table in upper case.

16. Write a query to get the first 3 characters of first name from employees table.

17. Write a query to calculate 171*214+625.

18. Write a query to get the name (for example Ellen Abel, Sundar Ande etc.) of all the employees from employees table.

19. Write a query to get first name from employees table after removing white spaces from both side.

20. Write a query to get the length of the employee names (first_name, last_name) from employees table.

21. Write a query to check if the first_name fields of the employees table contains numbers.

22. Write a query to select first 10 records from a table (employees).

23. Write a query to get monthly salary (round 2 decimal places) of all employees.

24. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range $10,000 through $15,000.

25. Write a query to display the name (first_name, last_name) and department ID of all employees in departments 30 or 100 in ascending order.

26. Write a query to display the first_name of all employees who have both "b" and "c" in their first name.

27. Write a query to select all record from employees where last name in 'BLAKE', 'SCOTT', 'KING' and 'FORD'.

28. Write a query to find the addresses (location_id, street_address, city, state_province, country_name) of all the departments. Hint : Use NATURAL JOIN.

29. Write a query to find the name (first_name, last name), department ID and name of all the employees.

30. Write a query to display department name, name (first_name, last_name), hire date, salary of the manager for all managers whose experience is more than 15 years.

31. Write a query to display job title, employee name, and the difference between salary of the employee and minimum salary for the job.

32. Write a query to display the job title and average salary of employees.