Muhamad Ichsan Dwi Farhana

-- DDL

create database db\_hr

create table tb\_m\_regions(

"id" int identity primary key,

"name" varchar(25) not null,

)

create table tb\_m\_countries(

"id" char(2) primary key,

"name" varchar(40) not null,

"region\_id" int not null

)

create table tb\_m\_locations(

"id" int identity primary key,

"street\_address" varchar(40) null,

"postal\_code" varchar(12) null,

"city" varchar(30) not null,

"state\_province" varchar(25) null,

"country\_id" char(2) not null

)

create table tb\_m\_departments(

"id" int primary key identity,

"name" varchar(30) not null,

"location\_id" int not null,

"manager\_id" int not null

)

create table tb\_m\_employess(

"id" int primary key identity,

"first\_name" varchar(20) not null,

"last\_name" varchar(25) null,

"email" varchar(25) unique not null,

"phone\_number" varchar(20) null,

"hire\_date" datetime not null,

"salary" int null,

"comission\_pct" decimal(8,2) null,

"manager\_id" int null,

"job\_id" char(2) not null,

"department\_id" int not null

)

create table tb\_tr\_histories(

"start\_date" datetime,

"employee\_id" int,

"end\_date" datetime null,

"department\_id" int not null,

"job\_id" char(2) not null,

constraint pk\_histories primary key (start\_date,employee\_id)

)

create table tb\_m\_jobs(

"id" char(2) primary key,

"title" varchar(35) not null,

"min\_salary" int null,

"max\_salary" int null

)

Alter table tb\_m\_departments add constraint fk\_location\_id

foreign key (location\_id) references tb\_m\_locations (id)

Alter table tb\_m\_countries add constraint fk\_region\_id

foreign key (region\_id) references tb\_m\_regions (id)

Alter table tb\_m\_locations add constraint fk\_country\_id

foreign key (country\_id) references tb\_m\_countries (id)

Alter table tb\_m\_departments add constraint fk\_manager\_id\_departments

foreign key (manager\_id) references tb\_m\_employess (id)

Alter table tb\_m\_employess add constraint fk\_manager\_id\_employess

foreign key (id) references tb\_m\_employess (id)

Alter table tb\_m\_employess add constraint fk\_department\_id

foreign key (department\_id) references tb\_m\_departments (id)

Alter table tb\_tr\_histories add constraint fk\_employee\_id

foreign key (employee\_id) references tb\_m\_employess (id)

Alter table tb\_tr\_histories add constraint fk\_department\_id\_histories

foreign key (department\_id) references tb\_m\_departments (id)

Alter table tb\_tr\_histories add constraint fk\_job\_id

foreign key (job\_id) references tb\_m\_jobs (id)

Alter table tb\_m\_employess add constraint fk\_job\_id\_employees

foreign key (job\_id) references tb\_m\_jobs (id)

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-- DML

insert into "tb\_m\_regions" (name)

values

('Africa'),

('Asia'),

('Central America'),

('Europe'),

('Middle East'),

('North America'),

('Pacific'),

('South America')

insert into "tb\_m\_countries" (id, name, region\_id)

values

('KE','Kenya',1),

('CN','China',2),

('SG','Singapore',2),

('MX','Mexico',3),

('ES','Spain',4),

('KW','Kuwait',5),

('CA','Canada',6),

('ID','indonesia',2),

('BR','Brazil',8),

('NG','Nigeria',1)

insert into "tb\_m\_locations" (street\_address, postal\_code, city, state\_province, country\_id)

values

('Jl Sukaasih Raya Atas','40195','Bandung','West Java','ID'),

('Jl Letjen S. Parman','11470','West Jakarta','Jakarta','ID'),

('Jl. Jenderal Sudirman No.53', '12190', 'South Jakarta', 'Jakarta', 'ID'),

('Jl. Let Jend S Parman', '11440','West Jakarta','Jakarta','ID'),

('Jl. Kyai H. Syahdan No.9', '11480', 'West Jakarta','Jakarta','ID'),

('Jl. Telekomunikasi', '40257', 'Bandung district', 'West Java','ID'),

('Jl. Ganesa No.10', '40132','Bandung','West Java','ID'),

('Jl. Dipati Ukur No.35', '40132','Bandung','West Java','ID'),

('Jl. Dr. Setiabudi No.193', '40153','Bandung','West Java','ID'),

('Jl. Letjen S. Parman No.28', '11470','West Jakarta','Jakarta','ID')

insert into "tb\_m\_jobs" (id,title,min\_salary,max\_salary)

values

('AR','Account Representative IV',3000000,5000000),

('PM','VP Product Management',3000000,6000000),

('PC','Pharmacist',3000000,7000000),

('SE','Software Test Engineer III',2700000,5500000),

('SS','Staff Scientist',2700000,6000000),

('AO','Administrative Officer',3200000,4500000),

('SR','Sales Representative',2500000,5500000),

('RM','Recruiting Manager',2100000,4000000),

('SP','Sales Representative',3200000,4000000),

('DS','Director of Sales',5000000,7000000)

insert into "tb\_m\_departments" (name, location\_id,manager\_id)

values

('Services',1,1),

('Engineering',2,2),

('Business Development',3,3),

('Human Resources',4,4),

('Accounting',5,5),

('Marketing',6,6),

('Legal',7,7),

('Training',8,8),

('Product Management',9,9),

('Sales',10,10)

insert into "tb\_m\_employess" (first\_name,last\_name,email,phone\_number,hire\_date,salary,manager\_id,job\_id,department\_id)

values

('Barbi', 'Shrieves', 'bshrieves0@bloomberg.com', '506-200-4257','9/5/2019',5000000,null,'AR',1),

('Jeanie', 'Alker', 'jalker1@tripadvisor.com', '904-133-9084','8/5/2019',6000000,null,'PM',2),

('Eugenie', 'Greaves', 'egreaves2@histats.com', '948-369-6305','8/5/2019',7000000,null,'PC',3),

('Munroe', 'Tugman', 'mtugman3@yandex.ru', '101-101-9526','3/5/2019',5500000,null,'SE',4),

('Armando', 'Mecozzi', 'amecozzi4@acquethname.com', '244-620-6024','2/5/2019',6000000,null,'SS',5),

('Alethea', 'Crysell', 'acrysell5@yale.edu', '329-691-6403','2/1/2019',4500000,null,'AO',6),

('Travers', 'Morston', 'tmorston6@over-blog.com', '189-870-0574','2/8/2019',5500000,null,'SR',7),

('Fredric', 'Bengefield', 'fbengefield7@1und1.de', '143-114-3806','2/8/2020',4000000,null,'RM',8),

('Ermina', 'Williams', 'ewilliams8@istphoto.com', '344-716-2299','2/8/2020',4000000,null,'SP',9),

('Welch', 'Forstall', 'wforstall9@prinendly.com', '432-747-3780','2/8/2020',7000000,null,'DS',10),

('Reese', 'Ales0', 'ralesa@uiuc.edu', '165-139-7203','9/5/2020',4000000,1,'AR',1),

('Grissel', 'Orsman', 'gorsmanb@pagespege.fr', '806-920-3612','9/5/2020',3000000,2,'PM',2),

('Bud', 'Gaythor', 'bgaythorc@markatch.com', '319-911-5664','9/5/2020',4000000,3,'PC',3),

('Merle', 'Fevers', 'mfeversd@ed.gov', '200-366-9553','2/5/2020',3000000,2,'PM',2),

('Terra', 'Bearcroft', 'tbearcrofte@joomla.org', '359-475-9091','9/5/2020',2300000,2,'PM',2),

('Regan', 'Mulligan', 'rmulliganf@engadget.com', '877-184-8719','9/3/2020',2300000,2,'PM',2),

('Virginia', 'Van Arsdalen', 'vvanaeng@american.com', '641-100-4561','9/7/2020',2700000,2,'PM',2),

('Symon', 'Dekeyser', 'sdekeyserh@booking.com', '323-780-4141','9/4/2020',2800000,2,'PM',2),

('Ernie', 'Tzarkov', 'etzarkovi@topsy.com', '503-351-2398','9/2/2020',5000000,10,'DS',10),

('Karen', 'Kollas', 'kkollasj@economist.com', '288-613-1008','9/3/2020',2803000,2,'PM',2)

insert into tb\_tr\_histories(start\_date, employee\_id, department\_id, job\_id, end\_date)

values

('9/5/2019',1,1,'AR',null),

('5/8/2019',2,2,'PM',null),

('5/8/2019',3,3,'PC',null),

('5/3/2019',4,4,'SE',null),

('5/2/2019',5,5,'SS',null),

('1/2/2019',6,6,'AO',null),

('8/2/2019',7,7,'SR',null),

('8/2/2020',8,8,'RM',null),

('8/2/2020',9,9,'SP',null),

('8/2/2020',10,10,'DS',null),

('5/9/2020',11,1,'AR',null),

('5/9/2020',12,2,'PM',null),

('5/9/2020',13,3,'PC',null),

('5/2/2020',14,2,'PM',null),

('5/9/2020',15,2,'PM',null),

('3/9/2020',16,2,'PM',null),

('7/9/2020',17,2,'PM',null),

('4/9/2020',18,2,'PM',null),

('2/9/2020',19,10,'DS',null),

('3/9/2020',20,2,'PM',null),

('9/5/2017',1,2,'PM','9/5/2019'),

('5/8/2016',2,4,'SE','5/8/2019'),

('5/8/2016',3,8,'RM','5/8/2019'),

('5/3/2018',4,9,'SP','5/3/2019'),

('5/2/2018',5,3,'PC','5/2/2019'),

('1/2/2015',6,10,'DS','1/2/2019'),

('8/2/2018',7,1,'AR','8/2/2019'),

('8/2/2019',8,2,'PM','8/2/2020'),

('8/2/2018',9,1,'AR','8/2/2020'),

('8/2/2019',10,3,'PC','8/2/2020')

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-- DQL

-- soal 1

select e.id as 'ID', CONCAT(e.first\_name,' ',e.last\_name) as 'Full Name',

e.email as Email, e.phone\_number as 'Phone', e.salary as 'Salary', d.name as 'Department Name',

l.street\_address as 'Street Address', c.name 'Country Name', r.name 'Region Name' from tb\_m\_employess e

join tb\_m\_departments d on e.department\_id = d.id

join tb\_m\_locations l on l.id = d.location\_id

join tb\_m\_countries c on c.id = l.country\_id

join tb\_m\_regions r on r.id = c.region\_id

-- soal 2

select d.name 'Department Name', COUNT(e.id) 'Count Employess', MIN(e.salary) 'Min Salary',

MAX(e.salary) 'Max Salary', AVG(e.salary) 'Average Salary' from tb\_m\_employess e

join tb\_m\_departments d on e.department\_id = d.id

group by d.name having COUNT(e.id) > 3

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-- TSQL

create or alter function fun\_get\_raise\_salary

(

@employee\_id int,

@percent int

)

returns float

as

begin

declare @raise\_salary float, @salary int

select @salary = salary from tb\_m\_employess where id = @employee\_id;

set @raise\_salary = (@salary \* @percent / 100) + @salary;

return @raise\_salary;

end

create or alter procedure sp\_get\_raise\_salary

@employee\_id int, @percent int

as

begin

select \* from tb\_m\_employess where id = @employee\_id;

update tb\_m\_employess

set salary = dbo.fun\_get\_raise\_salary(@employee\_id,@percent)

where id = @employee\_id

select \* from tb\_m\_employess where id = @employee\_id;

end

update tb\_m\_employess

set salary = 6000000

where id = 2

exec sp\_get\_raise\_salary 2, 100