T-SQL Queries

--Creating First Table

CREATE TABLE tblEmployee

(EmployeeNumber INT PRIMARY KEY NOT NULL,

EmployeeFirstName VARCHAR(50) NOT NULL,

EmployeeMiddleName VARCHAR(50) NULL,

EmployeeLastName VARCHAR(50) NOT NULL,

EmployeeGovernmentID CHAR(10) NULL,

DateOfBirth DATE NOT NULL)

--Add Column

ALTER TABLE tblEmployee

ADD Department VARCHAR(20) NOT NULL;

SELECT left(EmployeeLastName, 1) as Initial, Count(\*) as CountofInitial

FROM tblEmployee

WHERE DateOfBirth > '19860101'

GROUP BY left(EmployeeLastName, 1)

HAVING Count(\*) >= 20

ORDER BY Count(\*) Desc

--Adding Second and Third Table

CREATE TABLE tblTransaction (

Amount smallmoney Not Null,

DateOfTransaction datetime2 NULL,

EmployeeNumber int Not Null)

SELECT DISTINCT Department, convert(varchar(30), N'') as DepartmentHead

INTO tblDepartment

FROM tblEmployee

--Joining Three Tables

select D.DepartmentHead, Sum(T.Amount) as SumOfAmount,

Count(E.EmployeeNumber) as NumberOfEmployees

from tblDepartment as D

left join tblEmployee as E

on D.Department = E.Department

left join tblTransaction T

on E.EmployeeNumber = T.EmployeeNumber

group by D.DepartmentHead

order by D.DepartmentHead

--Adding Foreign Key Constraint

Alter Table tblTransaction

ADD CONSTRAINT FK\_tblTransaction\_EmployeeNumber FOREIGN KEY (EmployeeNumber)

REFERENCES tblEmployee(EmployeeNumber)