

## Задание №1

Вывести на экран самую раннюю дату начала работы сотрудника в каждом отделе. Дату вывести для каждого отдела.

```
-- the earliest start date in every department
select dep.Name, MIN(edh.StartDate) as StartDate
from HumanResources.EmployeeDepartmentHistory as edh
join HumanResources.Department as dep
on dep.DepartmentID = edh.DepartmentID
group by dep.Name
```

131 %

Results Messages

	Name	StartDate
1	Engineering	2001-12-12
2	Tool Design	2002-01-11
3	Sales	2005-02-04
4	Marketing	2001-02-26
5	Purchasing	2002-01-20
6	Research and Development	2003-01-30
7	Production	2000-07-31
8	Production Control	2003-01-02
9	Human Resources	2003-01-07
10	Finance	2003-01-19
11	Information Services	2003-01-05
12	Document Control	2003-01-17
13	Quality Assurance	2003-01-10
14	Facilities and Maintenance	2003-01-15
15	Shipping and Receiving	2003-01-08
16	Executive	2003-02-15

Вывести на экран название смены сотрудников, работающих на позиции 'Stocker'. Замените названия смен цифрами (Day — 1; Evening — 2; Night — 3).

```
-- stoker's shifts
select e.BusinessEntityId
      , e.JobTitle
      , case
          when s.Name = 'Day' then 1
          when s.Name = 'Evening' then 2
          when s.Name = 'Night' then 3
        else 0
        end
      as ShiftName
from HumanResources.Employee as e
join HumanResources.EmployeeDepartmentHistory as edh
  on edh.BusinessEntityID = e.BusinessEntityID
join HumanResources.Shift s
  on edh.ShiftID = s.ShiftID
where e.JobTitle = 'Stocker'
```

131 %

Results Messages

	BusinessEntityId	JobTitle	ShiftName
1	122	Stocker	2
2	124	Stocker	3
3	126	Stocker	1

Вывести на экран информацию обо всех сотрудниках, с указанием отдела, в котором они работают в настоящий момент. В названии позиции каждого сотрудника заменить слово 'and' знаком & (амперсанд).

```

-- all employees
select e.BusinessEntityId
, case
    when e.JobTitle like '%and%' then REPLACE(e.JobTitle, 'and', '&')
    else e.JobTitle
end
as JobTitle
, dep.Name as DepName
from HumanResources.Employee as e
join HumanResources.EmployeeDepartmentHistory as edh
on edh.BusinessEntityID = e.BusinessEntityID
join HumanResources.Department as dep
on edh.DepartmentID = dep.DepartmentID
where edh.EndDate is null

```

	BusinessEntityId	JobTitle	DepName
1	1	Chief Executive Officer	Executive
2	2	Vice President of Engineering	Engineering
3	3	Engineering Manager	Engineering
4	4	Senior Tool Designer	Tool Design
5	5	Design Engineer	Engineering
6	6	Design Engineer	Engineering
7	7	Research & Development Manager	Research and Development
8	8	Research & Development Engineer	Research and Development
9	9	Research & Development Engineer	Research and Development
10	10	Research & Development Manager	Research and Development
11	11	Senior Tool Designer	Tool Design
12	12	Tool Designer	Tool Design
13	13	Tool Designer	Tool Design
14	14	Senior Design Engineer	Engineering
15	15	Design Engineer	Engineering
16	16	Marketing Manager	Marketing
17	17	Marketing Assistant	Marketing
18	18	Marketing Specialist	Marketing
19	19	Marketing Assistant	Marketing
20	20	Marketing Assistant	Marketing
21	21	Marketing Specialist	Marketing
22	22	Marketing Specialist	Marketing
23	23	Marketing Specialist	Marketing
24	24	Marketing Specialist	Marketing
25	25	Vice President of Production	Production
26	26	Production Control Manager	Production Control
27	27	Production Supervisor - WC60	Production
28	28	Production Technician - WC60	Production
29	29	Production Technician - WC60	Production
30	30	Production Technician - WC60	Production
31	31	Production Technician - WC60	Production
32	32	Production Technician - WC60	Production

Query executed successfully.

2012 | 00:00:00 | 290 rows

## Задание №2

а) создайте таблицу `dbo.Person` с такой же структурой как `Person.Person`, кроме полей `xml`, `uniqueidentifier`, не включая индексы, ограничения и триггеры;

```
--- a) creating dbo.Person
create table dbo.Person (
    BusinessEntityID int not null
,   PersonType       nchar(2) not null
,   NameStyle        NameStyle not null
,   Title            nvarchar(8) null
,   FirstName        Name not null
,   MiddleName       Name null
,   LastName         Name not null
,   Suffix           nvarchar(10) null
,   EmailPromotion    int not null
,   ModifiedDate     datetime not null
)

--- b) adding PK
alter table dbo.Person
```

Messages

Commands completed successfully.

Completion time: 2020-09-21T12:19:22.7598724+03:00

b) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person составной первичный ключ из полей BusinessEntityID и PersonType;

```
--- b) adding PK
alter table dbo.Person
    add constraint PK_PersonID_and_Type primary key clustered (BusinessEntityId, PersonType);
```

Messages

Commands completed successfully.

Completion time: 2020-09-21T12:20:03.2903991+03:00

с) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person ограничение для поля PersonType, чтобы заполнить его можно было только значениями из списка 'GC','SP','EM','IN','VC','SC';

```
--- c) adding constraint to the "PersonType" field
alter table dbo.Person
    add constraint PersonType_Domain_Check
        check (PersonType in ('GC', 'SP', 'EM', 'IN', 'VC', 'SC'))
```

Messages

Commands completed successfully.

Completion time: 2020-09-21T12:20:41.5064779+03:00

d) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person ограничение DEFAULT для поля Title, задайте значение по умолчанию 'n/a';

```
--- d) adding default for the "Title" field
alter table dbo.Person
    add constraint Title_DefaultValue
    default 'n/a' for Title
--
```

Messages

Commands completed successfully.

Completion time: 2020-09-21T12:21:13.0656477+03:00

e) заполните таблицу dbo.Person данными из Person.Person только для тех лиц, для которых тип контакта в таблице ContactType определен как 'Owner'. Поле Title заполните значениями по умолчанию;

```
--- e) filling the table
insert
into dbo.Person (BusinessEntityID, PersonType, NameStyle, Title,
select
    p.BusinessEntityID, p.PersonType, p.NameStyle, p.Title,
from Person.Person p
join Person.BusinessEntityContact bec
    on p.BusinessEntityID = bec.PersonID
join Person.ContactType ct
    on ct.ContactTypeID = bec.ContactTypeID
where ct.Name = 'Owner';
-- and setting the default values
update dbo.Person
    set Title = default
    where Title is null
```

Messages

(266 rows affected)

(4 rows affected)

Completion time: 2020-09-21T12:21:55.3359170+03:00

f) измените размерность поля Title, уменьшите размер поля до 4-ти символов, также запретите добавлять null значения для этого поля.

```
--- f) alter the "Title" field
alter table dbo.Person
    alter column Title nvarchar(4) not null
-----
```

1 %

Messages

Commands completed successfully.

Completion time: 2020-09-21T12:22:50.0304447+03:00