

## Вариант 10

Дубовская Екатерина, 751001

### Задание 1

1. Вывести на экран почасовую ставку каждого сотрудника, округленную до целого числа.
2. Вывести на экран порядковый номер изменения почасовой ставки для каждого сотрудника по дате изменения ставки.
3. Вывести на экран информацию об отделах и работающих в них сотрудниках, отсортированную по полю JobTitle, а затем по полю HireDate в порядке убывания (если JobTitle сотрудника содержит одно слово) или по полю BirthDate в порядке убывания (если JobTitle сотрудника содержит несколько слов).

Результаты выполнения Задачи 1:

#### 2.1.1

|    | BusinessEntityID | JobTitle                          | RoundRate | Rate    |
|----|------------------|-----------------------------------|-----------|---------|
| 1  | 1                | Chief Executive Officer           | 126,00    | 125,50  |
| 2  | 2                | Vice President of Engineering     | 63,00     | 63,4615 |
| 3  | 3                | Engineering Manager               | 43,00     | 43,2692 |
| 4  | 4                | Senior Tool Designer              | 9,00      | 8,62    |
| 5  | 4                | Senior Tool Designer              | 24,00     | 23,72   |
| 6  | 4                | Senior Tool Designer              | 30,00     | 29,8462 |
| 7  | 5                | Design Engineer                   | 33,00     | 32,6923 |
| 8  | 6                | Design Engineer                   | 33,00     | 32,6923 |
| 9  | 7                | Research and Development Manager  | 50,00     | 50,4808 |
| 10 | 8                | Research and Development Engineer | 41,00     | 40,8654 |
| 11 | 9                | Research and Development Engineer | 41,00     | 40,8654 |
| 12 | 10               | Research and Development Manager  | 42,00     | 42,4808 |
| 13 | 11               | Senior Tool Designer              | 29,00     | 28,8462 |
| 14 | 12               | Tool Designer                     | 25,00     | 25,00   |

Query executed successfully. | LAPTOP-FREPJAND (11.0 SP2) | LAPTOP-FREPJAND\Ekater... | AdventureWorks2012 | 00:00:00 | 316 rows

#### 2.1.2

|    | BusinessEntityID | JobTitle                          | Rate    | ChangeNum... |
|----|------------------|-----------------------------------|---------|--------------|
| 1  | 1                | Chief Executive Officer           | 125,50  | 1            |
| 2  | 2                | Vice President of Engineering     | 63,4615 | 1            |
| 3  | 3                | Engineering Manager               | 43,2692 | 1            |
| 4  | 4                | Senior Tool Designer              | 8,62    | 1            |
| 5  | 4                | Senior Tool Designer              | 23,72   | 2            |
| 6  | 4                | Senior Tool Designer              | 29,8462 | 3            |
| 7  | 5                | Design Engineer                   | 32,6923 | 1            |
| 8  | 6                | Design Engineer                   | 32,6923 | 1            |
| 9  | 7                | Research and Development Manager  | 50,4808 | 1            |
| 10 | 8                | Research and Development Engineer | 40,8654 | 1            |
| 11 | 9                | Research and Development Engineer | 40,8654 | 1            |
| 12 | 10               | Research and Development Manager  | 42,4808 | 1            |
| 13 | 11               | Senior Tool Designer              | 28,8462 | 1            |
| 14 | 12               | Tool Designer                     | 25,00   | 1            |

Query executed successfully. | LAPTOP-FREPJAND (11.0 SP2) | LAPTOP-FREPJAND\Ekater... | AdventureWorks2012 | 00:00:00 | 316 rows

#### 2.1.3

100 %

Results Messages

|    | Name                 | JobTitle                                 | HireDate   | BirthDate  |
|----|----------------------|--|------------|------------|
| 1  | Finance              | Accountant                               | 2003-04-09 | 1973-08-01 |
| 2  | Finance              | Accountant                               | 2003-03-22 | 1970-02-04 |
| 3  | Finance              | Accounts Manager                         | 2003-03-03 | 1977-08-08 |
| 4  | Finance              | Accounts Payable Specialist              | 2003-04-02 | 1973-04-09 |
| 5  | Finance              | Accounts Payable Specialist              | 2003-03-15 | 1971-03-18 |
| 6  | Finance              | Accounts Receivable Specialist           | 2003-02-25 | 1978-10-22 |
| 7  | Finance              | Accounts Receivable Specialist           | 2003-01-19 | 1970-04-07 |
| 8  | Finance              | Accounts Receivable Specialist           | 2003-02-07 | 1970-03-26 |
| 9  | Information Services | Application Specialist                   | 2003-03-07 | 1982-04-14 |
| 10 | Information Services | Application Specialist                   | 2003-01-24 | 1979-03-03 |
| 11 | Information Services | Application Specialist                   | 2003-02-12 | 1975-07-28 |
| 12 | Information Services | Application Specialist                   | 2003-03-20 | 1972-06-19 |
| 13 | Finance              | Assistant to the Chief Financial Officer | 2003-02-13 | 1958-07-23 |
| 14 | Human Resources      | Benefits Specialist                      | 2003-01-26 | 1978-12-22 |

Query executed successfully. | LAPTOP-FREPIAND (11.0 SP2) | LAPTOP-FREPIAND\Ekater... | AdventureWorks2012 | 00:00:00 | 296 rows

## Задание 2

- создайте таблицу `dbo.Employee` с такой же структурой как `HumanResources.Employee`, кроме полей `OrganizationLevel`, `SalariedFlag`, `CurrentFlag`, а также кроме полей с типом `hierarchyid`, `uniqueidentifier`, не включая индексы, ограничения и триггеры;
- используя инструкцию `ALTER TABLE`, добавьте в таблицу `dbo.Employee` новое поле `ID`, которое является первичным ключом типа `bigint` и имеет свойство `identity`. Начальное значение для поля `identity` задайте 0 и приращение задайте 2;
- используя инструкцию `ALTER TABLE`, создайте для таблицы `dbo.Employee` ограничение для поля `BirthDate`, запрещающее заполнение поля датами ранее 1900 года и позже текущей даты;
- используя инструкцию `ALTER TABLE`, создайте для таблицы `dbo.Employee` ограничение `DEFAULT` для поля `HireDate`, задайте значение по умолчанию текущую дату;
- заполните новую таблицу данными из `HumanResources.Employee` только для тех сотрудников, у которых `EmailPromotion = 0` в таблице `Person.Person`. Поле `HireDate` заполните значениями по умолчанию;
- измените тип поля `MaritalStatus` на `NVARCHAR(1)` и разрешите добавление `null` значений для него.

Результаты выполнения Задачи 1:

### 2.2.1

Results

Messages

|   | Name     | Own... | Type       | Created_datetime        |
|---|----------|--------|------------|-------------------------|
| 1 | Employee | dbo    | user table | 2020-09-12 15:42:15.100 |

|    | Column_name      | Type     | Comput... | Len... | Pr... | Sc... | Nulla... | TrimTrailingBla... | FixedLenNullInSou... | Collation                    |
|----|------------------|----------|-----------|--------|-------|-------|----------|--------------------|----------------------|------------------------------|
| 1  | BusinessEntityID | int      | no        | 4      | 10    | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 2  | NationalIDNumber | nvarchar | no        | 30     |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 3  | LoginID          | nvarchar | no        | 512    |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 4  | JobTitle         | nvarchar | no        | 100    |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 5  | BirthDate        | date     | no        | 3      | 10    | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 6  | MaritalStatus    | nchar    | no        | 2      |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 7  | Gender           | nchar    | no        | 2      |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 8  | HireDate         | date     | no        | 3      | 10    | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 9  | VacationHours    | smallint | no        | 2      | 5     | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 10 | SickLeaveHours   | smallint | no        | 2      | 5     | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 11 | ModifiedDate     | datetime | no        | 8      |       |       | no       | (n/a)              | (n/a)                | NULL                         |

|   | Identity                    | Seed | Increm... | Not For Replicat... |
|---|-----------------------------|------|-----------|---------------------|
| 1 | No identity column defined. | NULL | NULL      | NULL                |

|   | RowGuidCol                    |
|---|-------------------------------|
| 1 | No rowguidcol column defined. |

|   | Data_located_on_filegr... |
|---|---------------------------|
| 1 | PRIMARY                   |

## 2.2.2-4

|   | Name     | Own... | Type       | Created_datetime        |
|---|----------|--------|------------|-------------------------|
| 1 | Employee | dbo    | user table | 2020-09-29 20:56:25.553 |

|    | Column_name    | Type     | Comput... | Len... | Pr... | Sc... | Nulla... | TrimTrailingBla... | FixedLenNullInSou... | Collation                    |
|----|----------------|----------|-----------|--------|-------|-------|----------|--------------------|----------------------|------------------------------|
| 5  | BirthDate      | date     | no        | 3      | 10    | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 6  | MaritalStatus  | nchar    | no        | 2      |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 7  | Gender         | nchar    | no        | 2      |       |       | no       | (n/a)              | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| 8  | HireDate       | date     | no        | 3      | 10    | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 9  | VacationHours  | smallint | no        | 2      | 5     | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 10 | SickLeaveHours | smallint | no        | 2      | 5     | 0     | no       | (n/a)              | (n/a)                | NULL                         |
| 11 | ModifiedDate   | datetime | no        | 8      |       |       | no       | (n/a)              | (n/a)                | NULL                         |
| 12 | ID             | bigint   | no        | 8      | 19    | 0     | no       | (n/a)              | (n/a)                | NULL                         |

|   | Identity | Se... | Increm... | Not For Replicat... |
|---|----------|-------|-----------|---------------------|
| 1 | ID       | 0     | 2         | 0                   |

|   | RowGuidCol                    |
|---|-------------------------------|
| 1 | No rowguidcol column defined. |

|   | Data_located_on_filegr... |
|---|---------------------------|
| 1 | PRIMARY                   |

|   | constraint_type            | constraint_name  | delete_acti... | update_act... | status_enab... | status_for_replica... | constraint_keys                     |
|---|----------------------------|------------------|----------------|---------------|----------------|-----------------------|-------------------------------------|
| 1 | CHECK on column BirthDate  | birth_date_check | (n/a)          | (n/a)         | Enabled        | Is_For_Replication    | ([BirthDate]>CONVERT([datetime],'19 |
| 2 | DEFAULT on column HireDate | default_type     | (n/a)          | (n/a)         | (n/a)          | (n/a)                 | (getdate())                         |

## 2.2.5

## Messages

(162 row(s) affected)

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Query executed successfully.

LAPTOP-FREPIAND (11.0 SP2)

LAPTOP-FREPIAND\Ekater...

AdventureWorks2012

00:00:00 0 rows

100 %

Results Messages

|    | BusinessEntit... | NationalIDNum... | LoginID                  | JobTitle                          | BirthDate  | MaritalStat... | Gen... | HireDate   | V ^ |
|----|------------------|------------------|--------------------------|-----------------------------------|------------|----------------|--------|------------|-----|
| 1  | 22               | 95958330         | adventure-works\sariya0  | Marketing Specialist              | 1981-06-21 | S              | M      | 2020-09-29 | 4   |
| 2  | 23               | 767955365        | adventure-works\mary0    | Marketing Specialist              | 1956-10-14 | M              | F      | 2020-09-29 | 4   |
| 3  | 24               | 72636981         | adventure-works\jill0    | Marketing Specialist              | 1973-07-19 | M              | F      | 2020-09-29 | 4   |
| 4  | 25               | 519899904        | adventure-works\james1   | Vice President of Production      | 1977-02-07 | S              | M      | 2020-09-29 | 6   |
| 5  | 26               | 277173473        | adventure-works\peter0   | Production Control Manager        | 1976-12-04 | M              | M      | 2020-09-29 | 4   |
| 6  | 27               | 446466105        | adventure-works\jo0      | Production Supervisor - WC60      | 1950-11-09 | S              | F      | 2020-09-29 | 8   |
| 7  | 28               | 14417807         | adventure-works\guy1     | Production Technician - WC60      | 1976-05-15 | M              | M      | 2020-09-29 | 2   |
| 8  | 11               | 974026903        | adventure-works\lovidiu0 | Senior Tool Designer              | 1972-02-18 | S              | M      | 2020-09-29 | 7   |
| 9  | 9                | 658797903        | adventure-works\gigi0    | Research and Development Engineer | 1973-02-21 | M              | F      | 2020-09-29 | 6   |
| 10 | 8                | 811994146        | adventure-works\diane1   | Research and Development Engineer | 1980-07-06 | S              | F      | 2020-09-29 | 6   |
| 11 | 6                | 998320692        | adventure-works\jossef0  | Design Engineer                   | 1953-04-11 | M              | M      | 2020-09-29 | 6   |
| 12 | 5                | 695256908        | adventure-works\gail0    | Design Engineer                   | 1946-10-29 | M              | F      | 2020-09-29 | 5   |
| 13 | 4                | 112457891        | adventure-works\rob0     | Senior Tool Designer              | 1969-01-23 | S              | M      | 2020-09-29 | 4   |
| 14 | 3                | 509647174        | adventure-works\roberto0 | Engineering Manager               | 1968-12-13 | M              | M      | 2020-09-29 | 2   |
| 15 | 1                | 295847284        | adventure-works\ken0     | Chief Executive Officer           | 1963-03-02 | S              | M      | 2020-09-29 | 9   |
| 16 | 30               | 410742000        | adventure-works\britta0  | Production Technician - WC60      | 1983-10-30 | M              | F      | 2020-09-29 | 1   |
| 17 | 33               | 801758002        | adventure-works\lannik0  | Production Technician - WC60      | 1971-01-27 | M              | M      | 2020-09-29 | 1   |
| 18 | 37               | 442121106        | adventure-works\chris2   | Production Technician - WC60      | 1980-09-07 | S              | M      | 2020-09-29 | 1   |
| 19 | 59               | 843479922        | adventure-works\bob0     | Production Technician - WC50      | 1973-09-16 | S              | M      | 2020-09-29 | 1   |
| 20 | 61               | 92096924         | adventure-works\diane2   | Production Technician - WC50      | 1983-09-10 | S              | F      | 2020-09-29 | 8   |
| 21 | 63               | 414476027        | adventure-works\maciej0  | Production Technician - WC60      | 1949-03-02 | S              | M      | 2020-09-29 | 3   |
| 22 | 65               | 8066363          | adventure-works\randv0   | Production Technician - WC60      | 1964-05-29 | M              | M      | 2020-09-29 | 2   |

Query executed successfully. LAPTOP-FREPIAND (11.0 SP2) LAPTOP-FREPIAND\Ekater... AdventureWorks2012 00:00:00 162 rows

## 2.2.6

Results Messages

| Name     | Own... | Type       | Created_datetime        |
|----------|--------|------------|-------------------------|
| Employee | dbo    | user table | 2020-09-12 15:42:15.100 |

  

| Column_name      | Type     | Comput... | Len... | Pr... | Sc... | Nulla... | TrimTrailingBl... | FixedLenNullInSou... | Collation                    |
|------------------|----------|-----------|--------|-------|-------|----------|-------------------|----------------------|------------------------------|
| BusinessEntityID | int      | no        | 4      | 10    | 0     | no       | (n/a)             | (n/a)                | NULL                         |
| NationalIDNumber | nvarchar | no        | 30     |       |       | no       | (n/a)             | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| LoginID          | nvarchar | no        | 512    |       |       | no       | (n/a)             | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| JobTitle         | nvarchar | no        | 100    |       |       | no       | (n/a)             | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| BirthDate        | date     | no        | 3      | 10    | 0     | no       | (n/a)             | (n/a)                | NULL                         |
| MaritalStatus    | nvarchar | no        | 2      |       |       | yes      | (n/a)             | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| Gender           | nchar    | no        | 2      |       |       | no       | (n/a)             | (n/a)                | SQL_Latin1_General_CP1_CI_AS |
| HireDate         | date     | no        | 3      | 10    | 0     | no       | (n/a)             | (n/a)                | NULL                         |

  

| Identity | Se... | Increm... | Not For Replicat... |
|----------|-------|-----------|---------------------|
| ID       | 0     | 2         | 0                   |

  

| RowGuidCol                    |
|-------------------------------|
| No rowguidcol column defined. |

  

| Data_located_on_filegr... |
|---------------------------|
| PRIMARY                   |

  

| constraint_type            | constraint_name               | delete_acti... | update_acti... | status_enab... | status_for_replica... | constraint_keys                                |
|----------------------------|-------------------------------|----------------|----------------|----------------|-----------------------|--|
| CHECK on column BirthDate  | CK_Employee__BirthD__5FD33367 | (n/a)          | (n/a)          | Enabled        | Is_For_Replication    | ([BirthDate]>CONVERT([datetime],'19000101',(11 |
| DEFAULT on column HireDate | DF_Employee__HireDa__60C757A0 | (n/a)          | (n/a)          | (n/a)          | (n/a)                 | (getdate())                                    |

Table is referenced by vi...