

Exercício SQL SERVER

Atividade 24/09/2021

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Capacitação PSG2021H3

Atividade Proposta

- 1 - Analisar as planilhas de RAW DATA.
- 2 - Importar as planilhas para o SQL Server (CSV).
- 3 - Analisar os dados importados, e criar as pesquisas para Departamento, País, e Funcionário.
- 4 - Criar Visões:
 - para exibir os dados pessoais dos funcionários.
 - para exibir os dados de empresa dos funcionários.
- 5 - Criar Store Procedure para busca do funcionário:
 - FuncionarioID
 - Chave

Segue passo a passo realizado na criação das tabelas.

Criar Tabelas

Cria Departamento

```
CREATE TABLE Departamento(  
    DepartamentoID int IDENTITY(1,1) NOT NULL,  
    Descricao nvarchar(50) NOT NULL,  
    DataInsert DATETIME NOT NULL DEFAULT GETDATE(),  
    CONSTRAINT PK_Departamento PRIMARY KEY (DepartamentoID)  
)  
GO
```

Cria Pais

```
CREATE TABLE Pais (  
    PaisID INT NOT NULL IDENTITY(1,1),  
    Descricao VARCHAR(50) NOT NULL,  
    Sigla CHAR(2) NOT NULL,  
    DataInsert DATETIME NOT NULL DEFAULT GETDATE(),  
    CONSTRAINT PK_Pais PRIMARY KEY (PaisID)  
)  
GO
```

Cria Funcionario

```
CREATE TABLE Funcionario  
(  
    Chave BIGINT NOT NULL,  
    FuncionarioID INT NOT NULL,  
    Nome varchar(50) NOT NULL,  
    Sobrenome varchar(50) NOT NULL,  
    Sexo char(1) NOT NULL,  
    Email varchar(255) NOT NULL,  
    CTPS varchar(60) NOT NULL,  
    NumeroCTPS BIGINT NOT NULL,  
    SerieCTPS INT NOT NULL,  
    PaisID INT NOT NULL,  
    DataAdmissao DATETIME NOT NULL,  
    DataNascimento DATETIME NOT NULL,  
    DataInsert DATETIME DEFAULT GETDATE(),  
    CONSTRAINT FK_Funcionario_Pais FOREIGN KEY(PaisID) REFERENCES Pais(PaisID),  
    CONSTRAINT PK_Funcionario PRIMARY KEY(FuncionarioID)  
)
```

Inserir nas Tabelas

Inserir na tabela Departamento

```
SET IDENTITY_INSERT Departamento ON
INSERT INTO Departamento(
    DepartamentoID,
    Descricao
)
SELECT
    deptoid,
    nome
from [dbo].[RAW DATA - Departamentos]
SET IDENTITY_INSERT Departamento OFF
```

Inserir na tabela Pais

```
SET IDENTITY_INSERT Pais ON

INSERT INTO Pais(
    PaisID,
    Descricao,
    Sigla
)
SELECT
    paisid,
    nome,
    abreviacao
FROM [CapacidadePSG2021H3].[dbo].[RAW DATA - Pais]

SET IDENTITY_INSERT Pais OFF
```

Inserir na tabela Funcionario

```
INSERT INTO Funcionario(
  Chave,
  FuncionarioID,
  Nome,
  Sobrenome,
  sexo,
  Email,
  CTPS,
  NumeroCTPS,
  SerieCTPS,
  PaisID,
  DataAdmissao,
  DataNascimento
)
SELECT EMPRESA.chave,
       PESSOA.funcid
       ,EMPRESA.nome
       ,EMPRESA.sobrenome
       ,sexo
       ,email
       ,ctps
       ,ctpsnum
       ,ctpsserie
       ,paisid
       ,dataadmissao
       ,datanascimento
FROM [CapacitacaoPSG2021H3].[dbo].[RAW DATA - Funcionarios - Dados Empresa] AS EMPRESA
INNER JOIN[dbo].[RAW DATA - Funcionarios - Dados Pessoais] as PESSOA ON EMPRESA.chave = PESSOA.CHAVE
```

Select TOP 1000 ROW das Tabelas

Departamento

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including the 'dbo' schema and the 'Departamento' table. The central query window contains the following SQL script:

```
/****** Script for SelectTopRows command from SSMS *****/  
SELECT TOP (1000) [DepartamentoID]  
    , [Descricao]  
    , [DataInsert]  
FROM [CapacitacaoPSG2021H3].[dbo].[Departamento]
```

The Results pane shows the top 10 rows of the query results:

DepartamentoID	Descricao	DataInsert
1	Customer Service	2021-09-24 14:50:22.587
2	Development	2021-09-24 14:50:22.587
3	Finance	2021-09-24 14:50:22.587
4	Human Resources	2021-09-24 14:50:22.587
5	Marketing	2021-09-24 14:50:22.587
6	Production	2021-09-24 14:50:22.587
7	Quality Management	2021-09-24 14:50:22.587
8	Research	2021-09-24 14:50:22.587
9	Sales	2021-09-24 14:50:22.587

The Properties pane on the right shows the connection details for the current session.

Pais

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including the 'dbo' schema and the 'Pais' table. The central query window contains the following SQL script:

```
/****** Script for SelectTopRows command from SSMS *****/  
SELECT TOP (1000) [PaisID]  
    , [Descricao]  
    , [Sigla]  
    , [DataInsert]  
FROM [CapacitacaoPSG2021H3].[dbo].[Pais]
```

The Results pane shows the top 17 rows of the query results:

PaisID	Descricao	Sigla	DataInsert
1	Canada	CA	2021-09-24 14:58:19.533
2	United States	US	2021-09-24 14:58:19.533
3	United Kingdom	GB	2021-09-24 14:58:19.533
4	Andorra	AD	2021-09-24 14:58:19.533
5	Anguilla	AI	2021-09-24 14:58:19.533
6	Argentina	AR	2021-09-24 14:58:19.533
7	Aruba	AW	2021-09-24 14:58:19.533
8	Australia	AU	2021-09-24 14:58:19.533
9	Austria	AT	2021-09-24 14:58:19.533
10	Bahamas	BS	2021-09-24 14:58:19.533
11	Bahrain	BH	2021-09-24 14:58:19.533
12	Barbados	BB	2021-09-24 14:58:19.533
13	Belgium	BE	2021-09-24 14:58:19.533
14	Bermuda	BM	2021-09-24 14:58:19.533
15	Botswana	BW	2021-09-24 14:58:19.533
16	Brazil	BR	2021-09-24 14:58:19.533
17	British Virgin I...	VG	2021-09-24 14:58:19.533

The status bar at the bottom indicates that the query was executed successfully, returning 103 rows.

Funcionario

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'LAB06\SQLXPRESS (SQL Server 15.0.2000 - LAB06\LAB06)'. The 'Tables' folder is expanded, showing various tables including 'dbo.Funcionario'. The main window shows a SQL query executed in the 'SQLQuery54.sql' file. The query is a 'SELECT TOP (1000)' statement listing columns: 'FuncionarioID', 'Chave', 'Nome', 'Sobrenome', and 'Sexo'. The results pane shows a table with 17 rows of data. The status bar at the bottom indicates the query was executed successfully, returning 1,000 rows.

```
SELECT TOP (1000)
    [FuncionarioID]
    , [Chave]
    , [Nome]
    , [Sobrenome]
    , [Sexo]
```

	FuncionarioID	Chave	Nome	Sobrenome	Sexo	Email	CTPS	Nume
1	10001	20100150001	Georgi	Facello	M	facello.georgi@acme.com	49001540741/380	4900
2	10002	20100150002	Bezalel	Simmel	F	simmel.bezalel@acme.com	38050201548/584	3805
3	10003	20100150003	Parto	Bamford	M	bamford.parto@acme.com	45152038868/403	4515
4	10004	20100150004	Christian	Koblick	M	koblick.christian@acme.com	93993062385/891	9399
5	10005	20100150005	Kyoichi	Malniak	M	malniak.kyoichi@acme.com	64885131268/229	6488
6	10006	20100150006	Anneke	Preusig	F	preusig.anneke@acme.com	32097781440/565	3209
7	10007	20100150007	Tzvetan	Zielinski	F	zielinski.tzvetan@acme.com	45521773009/130	4552
8	10008	20100150008	Saniya	Kalloufi	M	kalloufi.saniya@acme.com	61346916570/146	6134
9	10009	20100150009	Sumant	Peac	F	peac.sumant@acme.com	97392551134/059	9739
10	10010	20100150010	Duangkaew	Piveteau	F	piveteau.duangkaew@acme.com	67883327357/459	6788
11	10011	20100150011	Mary	Sluis	F	sluis.mary@acme.com	27643038714/533	2764
12	10012	20100150012	Patricio	Bridgland	M	bridgland.patricio@acme.com	21351765725/934	2135
13	10013	20100150013	Eberhardt	Terkki	M	terkki.eberhardt@acme.com	56169715657/667	5616
14	10014	20100150014	Bemi	Genin	M	genin.bemi@acme.com	6555228659/809	6555
15	10015	20100150015	Guoxiang	Nooteboom	M	nooteboom.guoxiang@acme.com	53561554492/173	5356
16	10016	20100150016	Kazuhiro	Cappelletti	M	cappelletti.kazuhiro@acme.com	75799810902/082	7579
17	10017	20100150017	Cristinel	Bouloucos	F	bouloucos.cristinel@acme.com	34272721832/847	3427

Query executed succes.. LAB06\SQLXPRESS (15.0 RTM) LAB06\LAB06 (57) CapacitacaoPSG2021H3 00:00:00 1,000 rows

Visões

Visão por funcionário com dados da empresa

```
CREATE VIEW dbo.VW_FuncionarioEmpresa
AS
SELECT
    FuncionarioID,
    Chave,
    Nome,
    Sobrenome,
    DataAdmissao,
    CTPS,
    NumeroCTPS,
    SerieCTPS
FROM dbo.Funcionario
```

Visão por funcionário com dados pessoais

```
CREATE VIEW dbo.VW_FuncionarioPessoa
AS
SELECT
    FuncionarioID,
    Chave,
    Nome,
    Sobrenome,
    Sexo,
    DataNascimento,
    Email,
    FUNC.PaisID,
    PA.Descricao
FROM dbo.Funcionario as FUNC
INNER JOIN Pais AS PA ON FUNC.PaisID = PA.PaisID
```

Procedures

Busca por Chave

```
CREATE PROCEDURE dbo.PR_FuncionarioPorChave
@Chave BIGINT
AS
SELECT
    FuncionarioID
    ,Chave
    ,Nome
    ,Sobrenome
    ,Sexo
    ,Email
    ,CTPS
    ,NumeroCTPS
    ,SerieCTPS
    ,F.PaisID
    ,PA.Descricao
    ,DataAdmissao
    ,DataNascimento
    ,F.DataInsert

FROM [CapacitacaoPSG2021H3].[dbo].[Funcionario] as F
INNER JOIN Pais AS PA ON F.PaisID = PA.PaisID
WHERE(@Chave = F.Chave)
```

Busca por FuncionarioID

```
CREATE PROCEDURE dbo.PR_FuncionarioPorFuncionarioID
@FuncionarioID INT
AS
SELECT
    FuncionarioID
    ,Chave
    ,Nome
    ,Sobrenome
    ,Sexo
    ,Email
    ,CTPS
    ,NumeroCTPS
    ,SerieCTPS
    ,F.PaisID
    ,PA.Descricao
    ,DataAdmissao
    ,DataNascimento
    ,F.DataInsert

FROM [CapacitacaoPSG2021H3].[dbo].[Funcionario] as F
INNER JOIN Pais AS PA ON F.PaisID = PA.PaisID
WHERE(@FuncionarioID = F.FuncionarioID)
```


