“Retorno dos gráficos dos itens 11 do GitHub”

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https://colab.research.google.com/drive/1MURm6X3-BQRCBwi2LyXk86_D7-6LSnSP#scrollTo=Xdjsz-uOgFb4

Instalando as bibliotecas

```
!pip install psycopg2-binary
!pip install seaborn
!pip install pandas
```

```
Collecting psycopg2-binary
  Downloading psycopg2_binary-2.9.1-cp37-cp37m-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (3.4 MB)
     |████████████████████████████████| 3.4 MB 5.1 MB/s
Installing collected packages: psycopg2-binary
Successfully installed psycopg2-binary-2.9.1
Requirement already satisfied: seaborn in /usr/local/lib/python3.7/dist-packages (0.11.1)
Requirement already satisfied: matplotlib>=2.2 in /usr/local/lib/python3.7/dist-packages (from seaborn) (3.2.2)
Requirement already satisfied: scipy>=1.0 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.4.1)
Requirement already satisfied: numpy>=1.15 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.19.5)
Requirement already satisfied: pandas>=0.23 in /usr/local/lib/python3.7/dist-packages (from seaborn) (1.1.5)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (0.10.0)
Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (1.3.1)
Requirement already satisfied: python-dateutil>=2.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (2.8.2)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in /usr/local/lib/python3.7/dist-packages (from matplotlib>=2.2->seaborn) (2.4.7)
Requirement already satisfied: six in /usr/local/lib/python3.7/dist-packages (from cycler>=0.10->matplotlib>=2.2->seaborn) (1.15.0)
Requirement already satisfied: pytz>=2017.2 in /usr/local/lib/python3.7/dist-packages (from pandas>=0.23->seaborn) (2018.9)
Requirement already satisfied: pandas in /usr/local/lib/python3.7/dist-packages (1.1.5)
Requirement already satisfied: pytz>=2017.2 in /usr/local/lib/python3.7/dist-packages (from pandas) (2018.9)
Requirement already satisfied: numpy>=1.15.4 in /usr/local/lib/python3.7/dist-packages (from pandas) (1.19.5)
Requirement already satisfied: python-dateutil>=2.7.3 in /usr/local/lib/python3.7/dist-packages (from pandas) (2.8.2)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/dist-packages (from python-dateutil>=2.7.3->pandas) (1.15.0)
```

Importando as bibliotecas

```
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import psycopg2
```

Configurando a conexão

```
[3] conn = psycopg2.connect(host="batyr.db.elephantsql.com",database="adjbbrvd", user="adjbbrvd", password="gvwWQkAJACxYwo5XJmr-1HIylE5ME6bt")
```

```
conn
```

```
<connection object at 0x7f875ad72440; dsn: 'user=adjbbrvd password=xxx dbname=adjbbrvd host=batyr.db.elephantsql.com', closed: 0>
```

Relatórios

Relatório 1

Obter o tempo que demorou para ser efetuada a retirada do material solicitado e qual foi a retirada feita

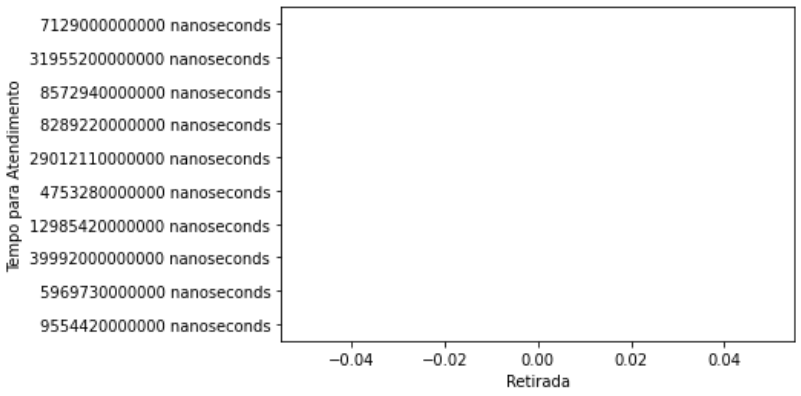
```
[34] Resultado = pd.read_sql_query("""select ret.num_retirada "Retirada", (ret.dataHora_retirada - ret.dataHora_solicitacao) "Tempo para Atendimento" from retirada ret""", conn)
```

```
Resultado
```

	Retirada	Tempo para Atendimento
0	100	0 days 01:58:49
1	101	0 days 08:52:35.200000
2	102	0 days 02:22:52.940000
3	103	0 days 02:18:09.220000
4	104	0 days 08:03:32.110000
5	105	0 days 01:19:13.280000
6	106	0 days 03:36:25.420000
7	107	0 days 11:06:32
8	108	0 days 01:39:29.730000
9	109	0 days 02:39:14.420000

```
[36] sns.barplot(x = 'Retirada', y = 'Tempo para Atendimento', data = Resultado)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f642eb6c290>
```



Relatório 2

Obter quantas vezes o usuário utilizou o aplicativo

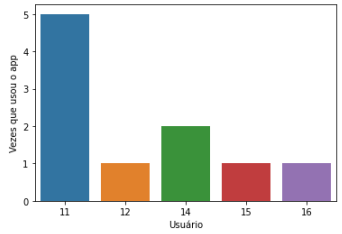
```
[17] Resultado = pd.read_sql_query ("""select count(*) "Vezes que usou o app", ret.fk_usuario_codigo_usuario "Usuário" from retirada ret group by ret.fk_usuario_codigo_usuario;""", conn)
```

```
[18] Resultado
```

	Vezes que usou o app	Usuário
0	5	11
1	1	15
2	2	14
3	1	16
4	1	12

```
[19] sns.barplot(x = 'Usuário', y = 'Vezes que usou o app', data = Resultado)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f64305d1210>
```



Relatório 3

Obter quantas solicitações de retirada cada catador atendeu

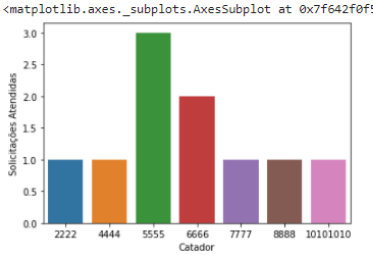
```
[22] Resultado = pd.read_sql_query("""select count(*) "Solicitações Atendidas", ret.fk_catador_matricula_catador "Catador" from retirada ret group by ret.fk_catador_matricula_catador;
     """, conn)
```

```
Resultado
```

	Solicitações Atendidas	Catador
0	1	7777
1	2	6666
2	3	5555
3	1	8888
4	1	2222
5	1	10101010
6	1	4444

```
[24] sns.barplot(x = 'Catador', y = 'Solicitações Atendidas', data = Resultado)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f642f0f5710>
```



Relatório 4

Obter quantas solicitações foram feitas em cada bairro

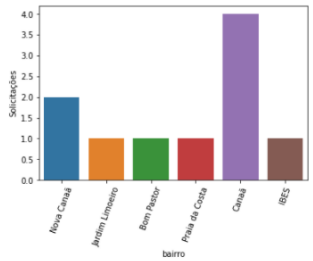
```
[25] Resultado = pd.read_sql_query ("""select count(*) "Solicitações", endco.bairro from retirada ret join endereco endco on (ret.fk_endereco_num_endereco = endco.num_endereco) group by endco.bairro;""", conn)
```

```
[26] Resultado
```

	Solicitações	bairro
0	2	Nova Canaã
1	1	Jardim Limoeiro
2	1	Bom Pastor
3	1	Praia da Costa
4	4	Canaã
5	1	IBES

```
[28] plt.xticks(rotation = 70)
     sns.barplot(x = 'bairro', y = 'Solicitações', data = Resultado)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f642ec5a910>
```



Relatório 5

Obter quantas retiradas cada associação realizou

```
[30] Resultado = pd.read_sql_query("""select count(*) "Solicitações Administradas", ret.fk_associacao_num_registro_associacao "Associação" from retirada ret group by ret.fk_associacao_num_registro_associacao order by count(*) asc;
     """, conn)
```

```
[31] Resultado
```

	Solicitações Administradas	Associação
0	1	999
1	1	888
2	1	555
3	1	444
4	1	111
5	1	666
6	2	101010
7	2	777

```
[32] sns.barplot(x = 'Associação', y = 'Solicitações Administradas', data = Resultado)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f642eb83110>
```