relatorio_data1

February 1, 2023

Relatório Data - Reunião 01/02/2023

[ ]:
```
import os
import numpy as np
import matplotlib.pyplot as plt
```

[ ]:
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lista_caminho = os.listdir('C:\\Users\\Riallen\\Documents\\Att\\Data')
print(lista_caminho)
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```

[ ]:
```
#Total de empresas consultadas
tamnho_empresas = len(lista_caminho)
print(tamnho_empresas)
```

```
543
```

[ ]:
```
#Análise de relatórios
#contador_relatorios
t = 0
lista = []
for caminho in lista_caminho:
    path_caminho_pdf = 'C:\\Users\\Riallen\\Documents\\Att\\Data\\' + caminho
```

```
    relatorio_pdf = os.listdir(path_caminho_pdf)
    for lista_pdf in relatorio_pdf:
        #print(lista_pdf)
        lista.append(lista_pdf)
        t = t + 1
#quantidade total de relatorios baixados
print(t)
```

3558

[ ]:
```
#organização da lista
#Pegar apenas os anos das strings
anos = []
for name in lista:
    org = name.split('_')
    org2 = org[1].split('.')
    anos.append(int(org2[0]))
print(anos)
#o tamanho de anos deve ser igual a t
print(len(anos))
```

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2018, 2020, 2021, 2012, 2013, 2014, 2015, 2017, 2018, 2013, 2014, 2015, 2016,
2017, 2018, 2019, 2020, 2021, 2018, 2019, 2020, 2021]
3558
```
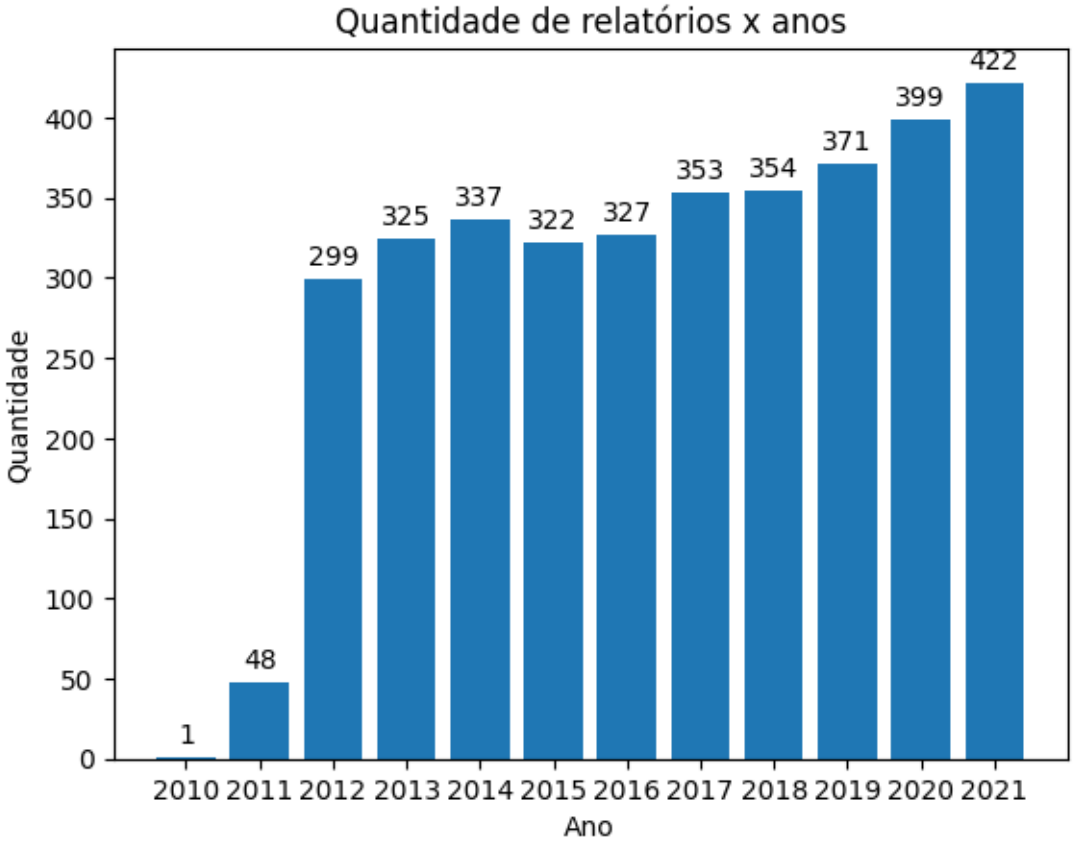

[ ]:
```
print("Ano minimo: ", min(anos))
print("Ano máximo: ", max(anos))
contador_anos = np.zeros(12, dtype = int)
real_ano = 2010
i = 0
while real_ano <= 2021:
    print(real_ano)
    for j in anos:
        if j == real_ano:
            contador_anos[i] = contador_anos[i] + 1
    real_ano = real_ano + 1
    i = i + 1
print(contador_anos)
print(sum(contador_anos))
```

```
Ano minimo:  2010
Ano máximo:  2021
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
[  1  48 299 325 337 322 327 353 354 371 399 422]
3558
```

[ ]:
```
#Gráfico gerado após análise
fig, ax = plt.subplots()
X = ['2010', '2011', '2012', '2013', '2014', '2015', '2016' ,'2017' ,'2018'␣
 ↪,'2019' ,'2020', '2021']
rect1 = ax.bar(X, contador_anos)
ax.set_ylabel('Quantidade')
ax.set_title("Quantidade de relatórios x anos")
```

```
ax.set_xlabel('Ano')
ax.bar_label(rect1, padding = 3)
plt.show()
```



[ ]:
```
#Empresa 2010
#Pegar apenas os anos das strings
empresa_2010 = []
for name in lista:
    org = name.split('_')
    org2 = org[1].split('.')
    #print(org2[0])
    if org2[0] == '2010':
        empresa_2010.append(name)
print(empresa_2010)
#o tamanho de anos deve ser igual a t
print(len(empresa_2010))
```

```
['GPAR3_2010.pdf']
1
```

[ ]:
```
#Realizar pesquisa na empresa GPAR3
GPAR3 = []
for empresa in lista_caminho:
    if empresa == "GPAR3":
        path_caminho_pdf_2010 = 'C:\\Users\\Riallen\\Documents\\Att\\Data\\' +␣
 ↪empresa
        relatorio_pdf_2010 = os.listdir(path_caminho_pdf_2010)
        for lista_pdf_2010 in relatorio_pdf_2010:
        #print(lista_pdf)
            GPAR3.append(lista_pdf_2010)
#quantidade total de relatorios baixados
print(GPAR3)
print(len(GPAR3))
```

```
['GPAR3_2010.pdf', 'GPAR3_2011.pdf', 'GPAR3_2012.pdf', 'GPAR3_2013.pdf',
'GPAR3_2014.pdf', 'GPAR3_2015.pdf', 'GPAR3_2016.pdf', 'GPAR3_2017.pdf',
'GPAR3_2018.pdf', 'GPAR3_2019.pdf', 'GPAR3_2020.pdf', 'GPAR3_2021.pdf']
12
```

Ao observar a pasta da empresa GPAR3 descobrimos que consta os relatórios de 2010 - 2021

[ ]:
```
#Empresa 2011
empresa_2011 = []
names_empresas_2011 = []
for name in lista:
    org = name.split('_')
    org2 = org[1].split('.')
    #print(org2[0])
    if org2[0] == '2011':
        names_empresas_2011.append(org[0])
        empresa_2011.append(name)
print(empresa_2011)
#o tamanho de anos deve ser igual a t
print(len(empresa_2011))
```

```
['APTI3_2011.pdf', 'APTI4_2011.pdf', 'BAHI3_2011.pdf', 'BRAP3_2011.pdf',
'BRAP4_2011.pdf', 'BRAP99_2011.pdf', 'CATA3_2011.pdf', 'CGAS3_2011.pdf',
'CGAS5_2011.pdf', 'DASA3_2011.pdf', 'EMBR3_2011.pdf', 'FRTA3_2011.pdf',
'GGBR3_2011.pdf', 'GGBR4_2011.pdf', 'GOAU3_2011.pdf', 'GOAU4_2011.pdf',
'GOLL3_2011.pdf', 'GOLL4_2011.pdf', 'GPAR3_2011.pdf', 'GRND3_2011.pdf',
'GUAR3_2011.pdf', 'HAGA3_2011.pdf', 'HBSA3_2011.pdf', 'JBSS3_2011.pdf',
'KLBN11_2011.pdf', 'KLBN4_2011.pdf', 'LIPR3_2011.pdf', 'LTEL5B_2011.pdf',
'MAPT3_2011.pdf', 'MAPT4_2011.pdf', 'MSPA3_2011.pdf', 'MSPA4_2011.pdf',
'NEMO3_2011.pdf', 'NEMO6_2011.pdf', 'PETR3_2011.pdf', 'PETR4_2011.pdf',
'PGMN3_2011.pdf', 'POMO4_2011.pdf', 'QUAL3_2011.pdf', 'ROMI3_2011.pdf',
'SAPR11_2011.pdf', 'SAPR3_2011.pdf', 'SAPR4_2011.pdf', 'STBP3_2011.pdf',
'STKF3_2011.pdf', 'TOTS3_2011.pdf', 'VALE3_2011.pdf', 'VIVT3_2011.pdf']
48
```

[ ]:
```
print(names_empresas_2011)
```

```
['APTI3', 'APTI4', 'BAHI3', 'BRAP3', 'BRAP4', 'BRAP99', 'CATA3', 'CGAS3',
'CGAS5', 'DASA3', 'EMBR3', 'FRTA3', 'GGBR3', 'GGBR4', 'GOAU3', 'GOAU4', 'GOLL3',
'GOLL4', 'GPAR3', 'GRND3', 'GUAR3', 'HAGA3', 'HBSA3', 'JBSS3', 'KLBN11',
'KLBN4', 'LIPR3', 'LTEL5B', 'MAPT3', 'MAPT4', 'MSPA3', 'MSPA4', 'NEMO3',
'NEMO6', 'PETR3', 'PETR4', 'PGMN3', 'POMO4', 'QUAL3', 'ROMI3', 'SAPR11',
'SAPR3', 'SAPR4', 'STBP3', 'STKF3', 'TOTS3', 'VALE3', 'VIVT3']
```

[ ]:
```
#realizar pesquisa nas empresas de 2011 sem a GPAR3
lista_de_empresas_2011 = []

for name_emp in names_empresas_2011:
    for empresa in lista_caminho:
        if empresa == name_emp:
            path_caminho_pdf_2011 = 'C:
 ↪\\Users\\Riallen\\Documents\\Att\\Data\\' + empresa
            relatorio_pdf_2011 = os.listdir(path_caminho_pdf_2011)
            att = []
            for lista_pdf_2011 in relatorio_pdf_2011:
                #print(lista_pdf)
                att.append(lista_pdf_2011)
            lista_de_empresas_2011.append(att)
#quantidade total de relatorios baixados
print(lista_de_empresas_2011)
print(len(lista_de_empresas_2011))
```

```
[['APTI3_2011.pdf', 'APTI3_2012.pdf', 'APTI3_2013.pdf', 'APTI3_2014.pdf',
'APTI3_2015.pdf', 'APTI3_2016.pdf', 'APTI3_2017.pdf', 'APTI3_2018.pdf',
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48
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[ ]:
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#quantidade de relatórios em cada empresa
tam_emp = np.zeros(48, dtype = int)
i = 0
for pesquisa in lista_de_empresas_2011:
    for k in pesquisa:
        #print(k)
        tam_emp[i] = tam_emp[i] + 1
    i = i + 1
print(tam_emp)
```

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