

2 Sprendimai

In [2]:

```
1 # 1. Pakeistas datos formatas
2
3 from datetime import date, time, datetime, timedelta
4 viesbuciai['Data'] = pd.to_datetime(viesbuciai['Data'], format = '%m/%d/%Y')
5 viesbuciai
```

Out[2]:

	Id_nr	Pavadinimas	Data	Kategorija	Adresas	Kaina	Kambario m²	Pusryciai	Zvaigzduciu_sk
0	1	Ivoluta	2022-02-01	Viesbutis	Geliu g. 5	47	25	IN	3
1	2	Mabre Residence	2022-02-01	Viesbutis	Maironio g. 13	40	18	NOT IN	4
2	2	Mabre Residence	2022-02-01	Viesbutis	Maironio g. 13	57	18	IN	4
3	9	Hilton Garden Inn Vilnius City Centre	2022-01-01	Viesbutis	Gedimino av. 44 B	86	23	IN	4
4	9	Hilton Garden Inn Vilnius City Centre	2022-01-01	Viesbutis	Gedimino av. 44 B	71	23	NOT IN	4
...
1546	8	Artis Centrum Hotels	2022-02-16	Viesbutis	Totoriu g. 23	72	23	IN	4
1547	8	Artis Centrum Hotels	2022-03-11	Viesbutis	Totoriu g. 23	72	23	IN	4
1548	8	Artis Centrum Hotels	2022-08-15	Viesbutis	Totoriu g. 23	82	23	IN	4
1549	8	Artis Centrum Hotels	2022-06-24	Viesbutis	Totoriu g. 23	82	23	IN	4
1550	8	Artis Centrum Hotels	2022-07-06	Viesbutis	Totoriu g. 23	82	23	IN	4

1551 rows x 9 columns

In [3]:

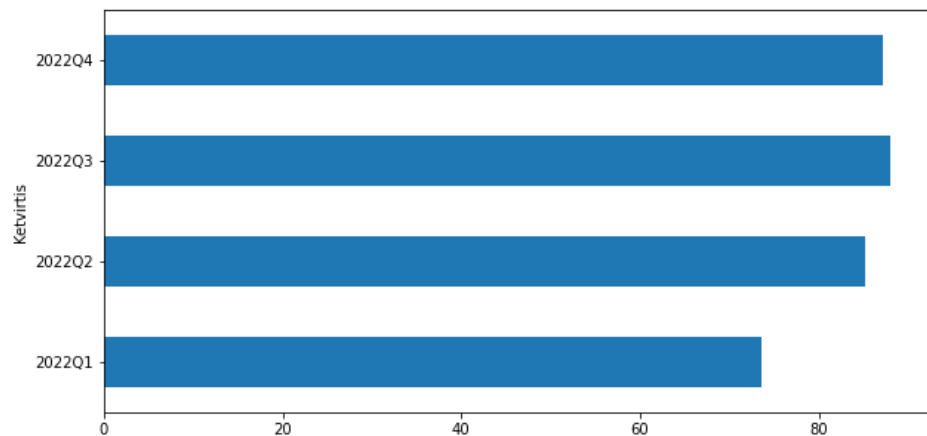
```
1 # 2. Kiek is viso viesbuciu.
2
3 viesbuciai.groupby('Pavadinimas').count()
```

Out[3]:

```
Id_nr  Data  Kategorija  Adresas  Kaina  Kambario m²  Pusryciai  Zvaigzduciu_sk
```

In [34]: 1 viesbuciai.groupby('Ketvirtis')['Kaina'].mean().plot(kind='barh', figsize=(10,5))

Out[34]: <AxesSubplot:ylabel='Ketvirtis'>



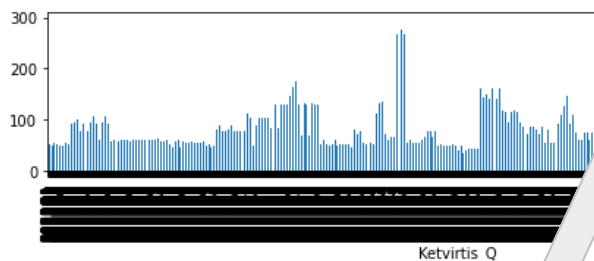
In [37]:

```
1 # 11. sukurtos lenteles su kainomis max/vid/min pagal zvaigzduciu sk su kiekviena data
2
3 Zvaigzdes_1 = viesbuciai.groupby(['Zvaigzduciu_sk', 'Data'])['Kaina'].max().reset_index()
4 Zvaigzdes_1
```

	Id_nr	Pavadinimas	Data	Kategorija	Adresas	Kaina	Kambario m²	Pusryciai	Zvaigzduciu_sk
...
...	8	Artis Centrum Hotels	2022-07-06	Viesbutis	Totoriu g. 23	82	23	IN	4

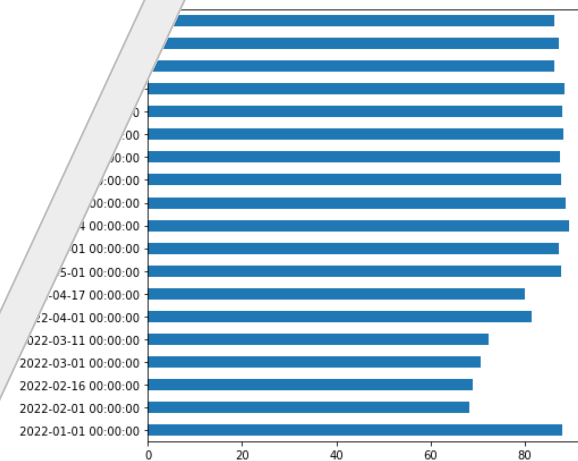
1551 rows x 15 columns

```
1 import matplotlib.pyplot as plt
2 viesbuciai_1.plot.bar(x='Ketvirtis_Q', y='Kaina_mean_Q',
3 plt.show())
```



```
viesbuciai.groupby('Data')['Kaina'].mean().plot(kind='barh', figsize=(7,7))
```

Out[34]:



Out[12]:

```
1 # 10. Sukurtas ketvirtio stulpelis.
2
3 viesbuciai['Ketvirtis'] = viesbuciai['Data'].dt.to_period('q')
4 viesbuciai
```

```
Id_nr  Pavadinimas  Data  Kategorija  Adresas  Kaina  Kambario m²  Pusryciai  Zvaigzduciu_sk  Kvadrato_kaina  Ketvirtis
```