01_napredne_graficke_metode

August 1, 2025

[1]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

[2]:
```
stanovi = pd.read_excel("../../datasets/stanovi_zagreb.xlsx")
```

[3]:
```
stanovi.head()
```

[3]:

	cetvrt	br soba	povrsina	kupaona	kvaliteta stana	posjeduje balkon	cijena	broj dana u oglasu (ndhwelyjduw)
0	Tresnjevka	2	80.0	1	dobro	ne	160000	43
1	Utrine	1	55.0	1	dobrrrro	da	82000	32
2	Centar	3	120.0	2	lose	da	330000	69
3	Siget	2	90.0	2	odlicno	da	180000	46
4	Tresnjevka	1	45.0	1	odlicno	ne	-90000	22

[4]:
```
stanovi.describe()
```

[4]:

	br soba	povrsina	kupaona	cijena	broj dana u oglasu (ndhwelyjduw)
count	29.000000	27.000000	29.000000	29.000000	29.000000
mean	2.758621	80.370370	1.379310	179034.482759	51.000000
std	3.776385	28.720333	0.621852	116653.786528	22.440397
min	1.000000	30.000000	1.000000	-90000.000000	
25%	2.000000	60.000000	1.000000	120000.000000	
50%	2.000000	80.000000	1.000000	160000.000000	
75%	3.000000	92.500000	2.000000	200000.000000	
max	22.000000	150.000000	3.000000	620000.000000	

```
min                              21.000000
25%                              38.000000
50%                              46.000000
75%                              55.000000
max                             105.000000
```

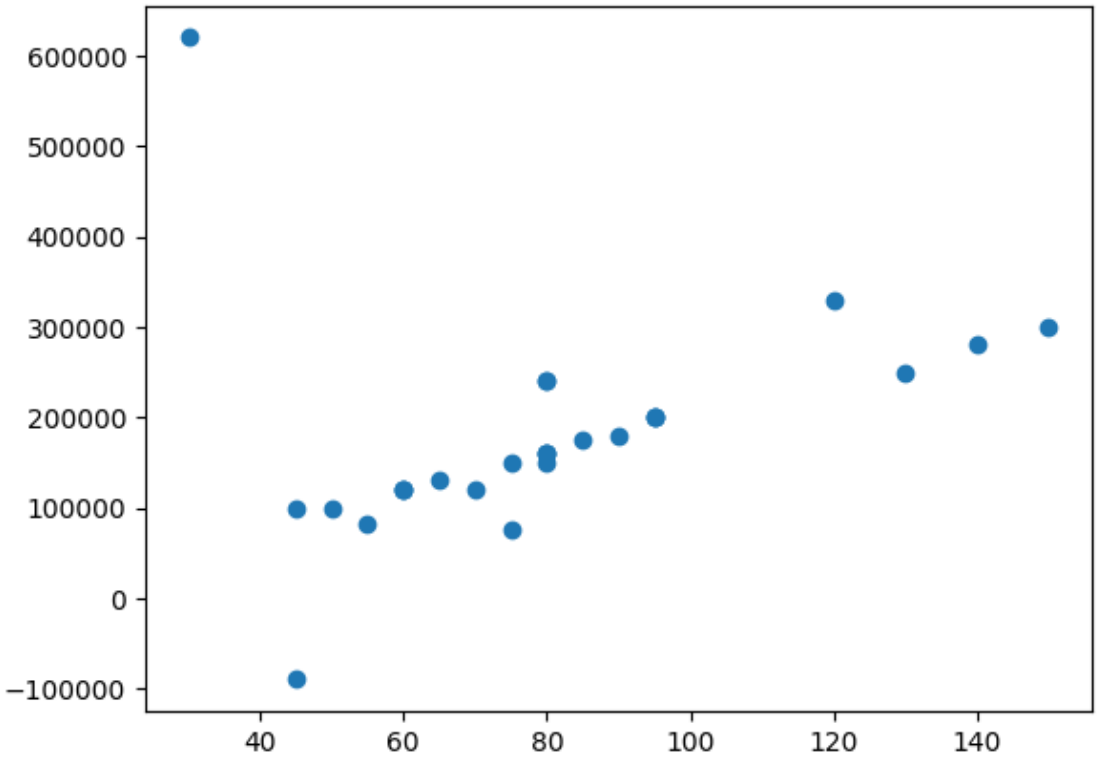
[5]:
```
stanovi.corr(numeric_only=True)
```

[5]:
```
                                 br soba  povrsina   kupaona    cijena  \
br soba                         1.000000  0.142667  0.040380  0.014531
povrsina                        0.142667  1.000000  0.853982  0.282403
kupaona                         0.040380  0.853982  1.000000  0.344937
cijena                          0.014531  0.282403  0.344937  1.000000
broj dana u oglasu (ndhwelyjduw)  0.029079  0.879864  0.808745  0.329371

                                broj dana u oglasu (ndhwelyjduw)
br soba                                                 0.029079
povrsina                                                0.879864
kupaona                                                 0.808745
cijena                                                  0.329371
broj dana u oglasu (ndhwelyjduw)                        1.000000
```

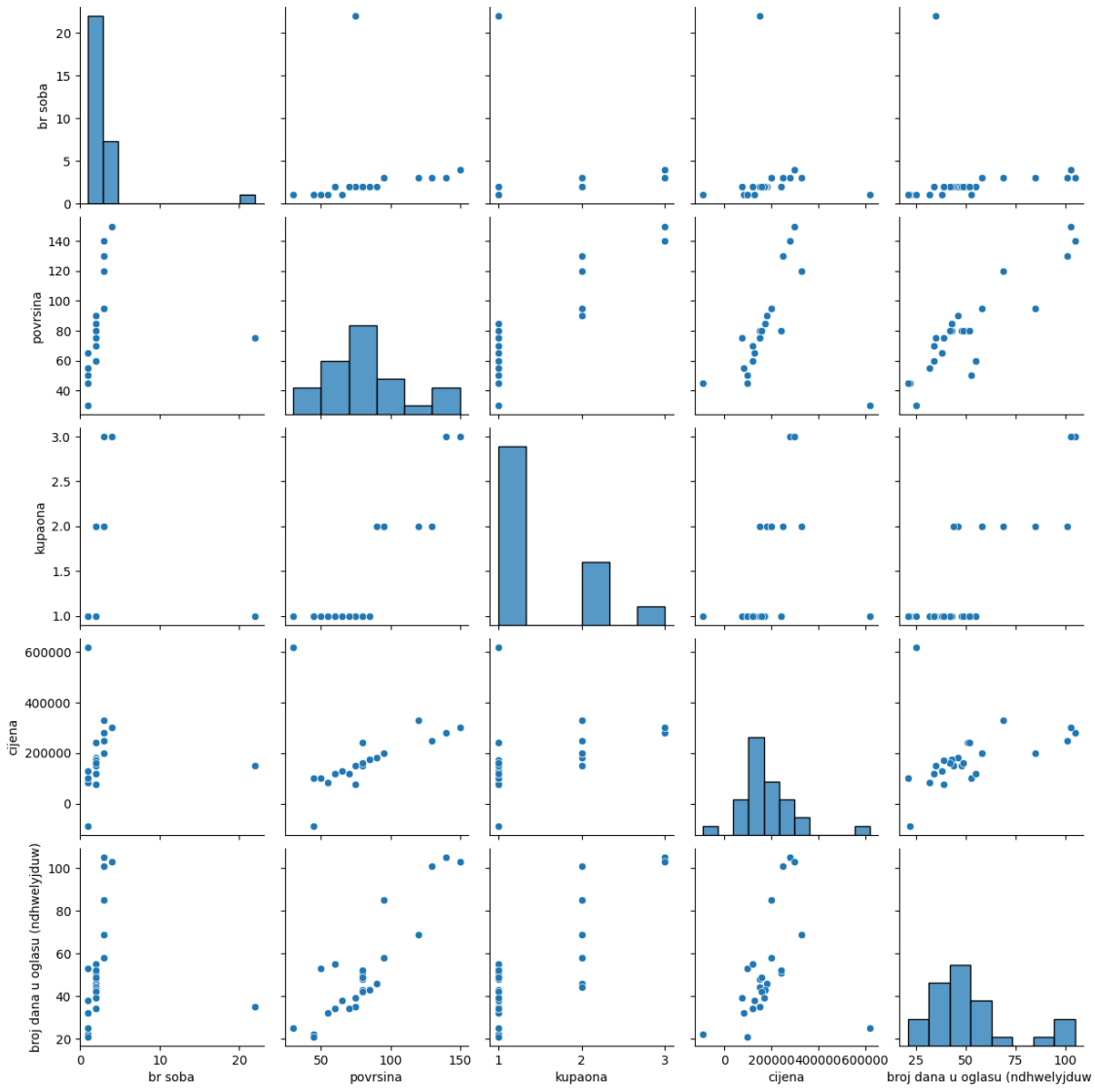
[6]:
```
plt.scatter(x=stanovi["povrsina"], y=stanovi["cijena"])
```

[6]:
```
<matplotlib.collections.PathCollection at 0x7f35b1a63750>
```



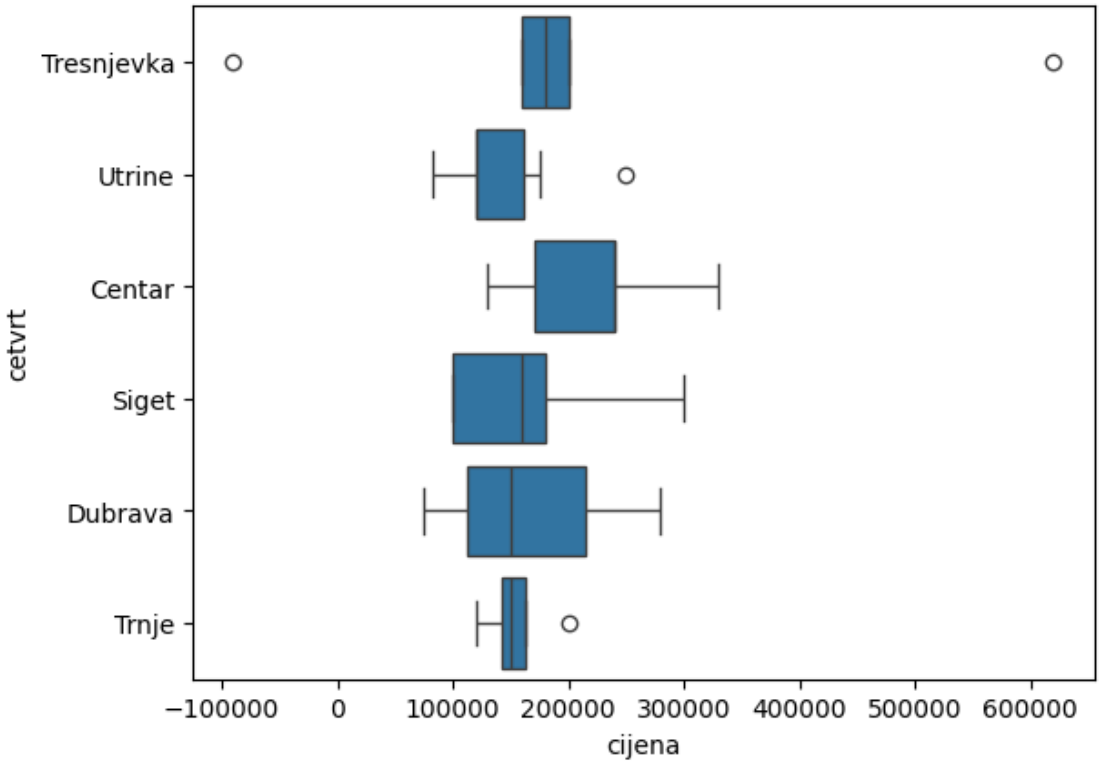
[7]:
```
sns.pairplot(stanovi)
```

[7]: <seaborn.axisgrid.PairGrid at 0x7f35ec8a3550>



[8]:
```
sns.boxplot(x = "cijena", y = "cetvrt", data = stanovi)
```

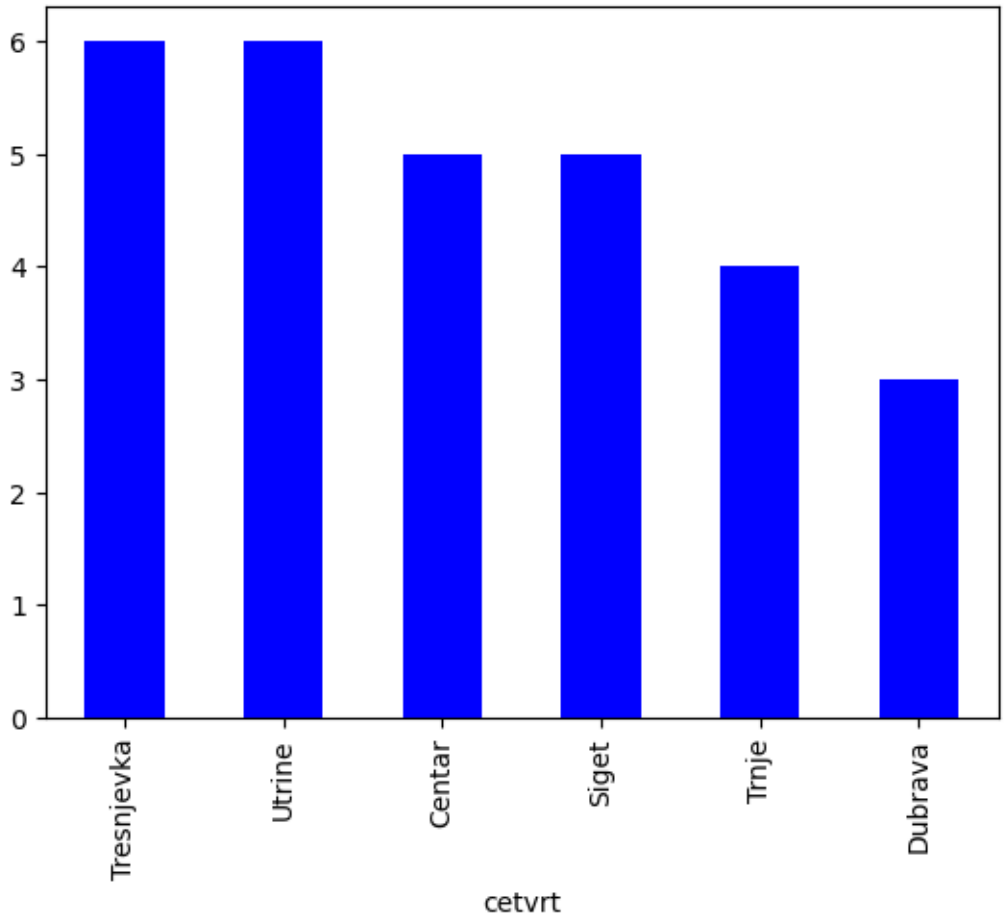
[8]: <Axes: xlabel='cijena', ylabel='cetvrt'>



[9]:
```
cetvrti = stanovi["cetvrt"].value_counts()
```

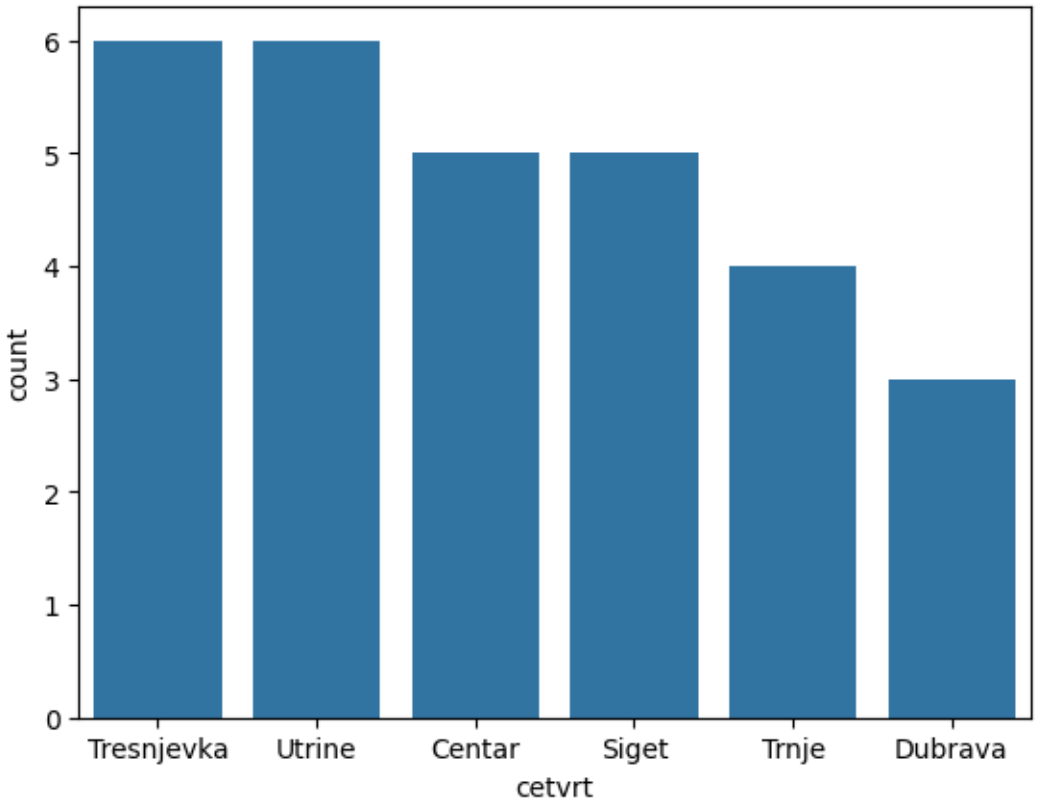
[10]:
```
cetvrti.plot(kind="bar", color="blue")
```

[10]: <Axes: xlabel='cetvrt'>



[11]:
```
sns.barplot(data=cetvrti)
```

[11]: <Axes: xlabel='cetvrt', ylabel='count'>

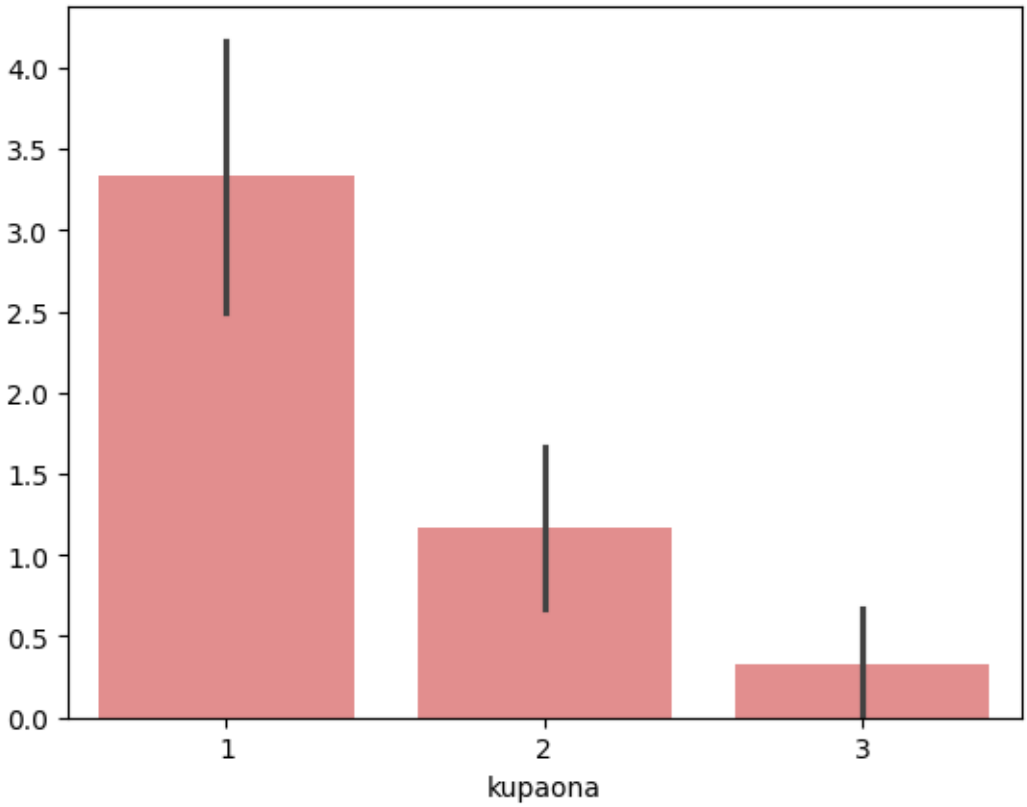


[12]:
```
cetvrti_kupaona = stanovi.groupby(['cetvrt', 'kupaona']).size().
↪unstack(fill_value=0)
cetvrti_kupaona
```

[12]:
```
kupaona     1  2  3
cetvrt
Centar      4  1  0
Dubrava     2  0  1
Siget       3  1  1
Tresnjevka  4  2  0
Trnje       2  2  0
Utrine      5  1  0
```

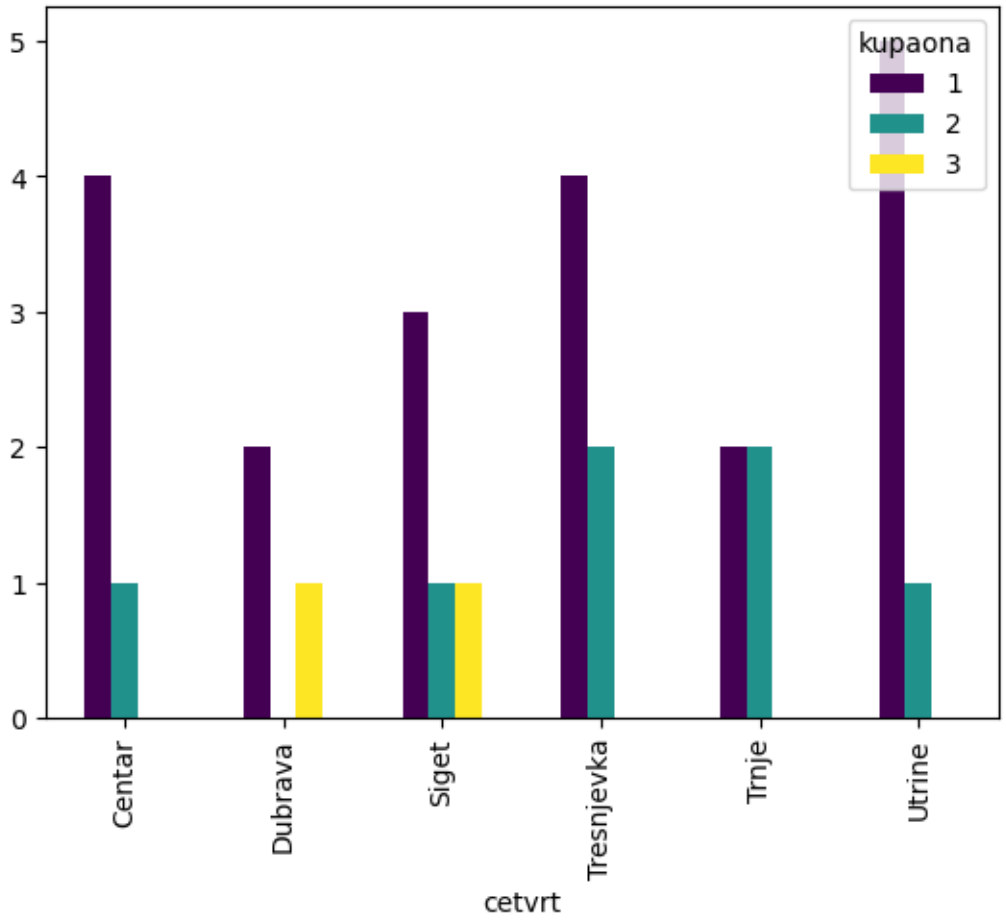
[13]:
```
sns.barplot(data=cetvrti_kupaona, color="lightcoral")
```

[13]:
```
<Axes: xlabel='kupaona'>
```



[14]:
```
cetvrti_kupaona.plot(kind='bar', ax=plt.gca(), cmap='viridis')
```

[14]:
```
<Axes: xlabel='cetvrt'>
```

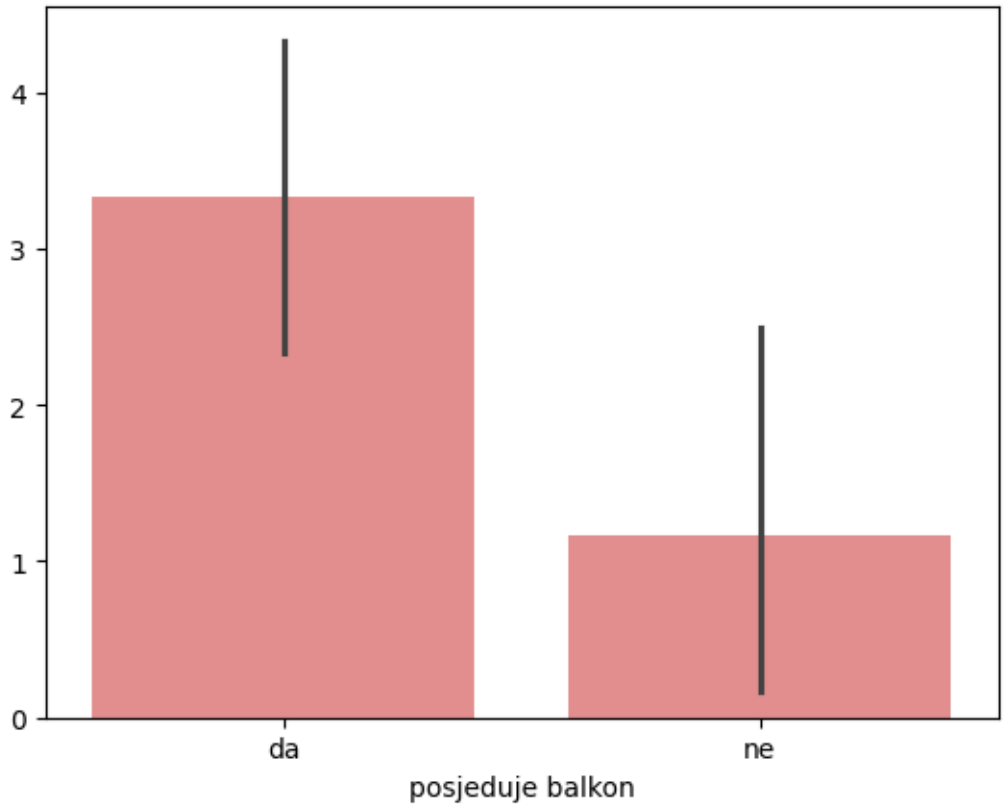


[15]:
```
cetvrti_balkon = stanovi.groupby(['cetvrt', 'posjeduje balkon']).size().
↪unstack(fill_value=0)
cetvrti_balkon
```

[15]:
```
posjeduje balkon  da  ne
cetvrt
Centar             5   0
Dubrava            3   0
Siget              2   2
Tresnjevka         2   4
Trnje              3   0
Utrine             5   1
```

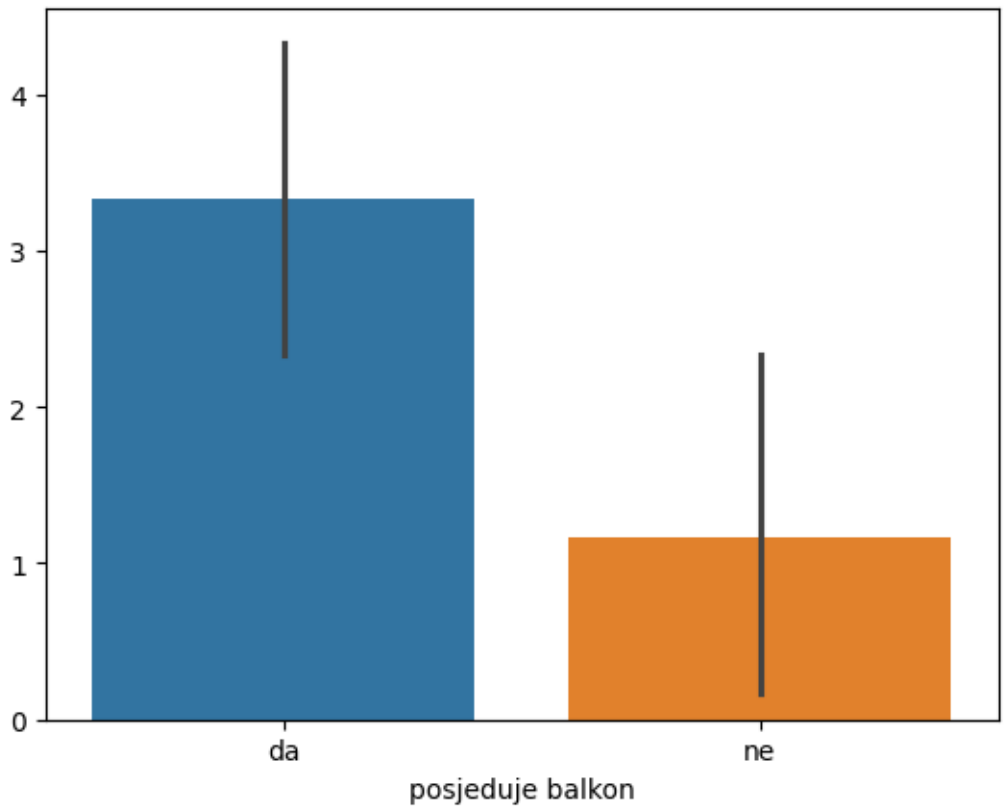
[16]:
```
sns.barplot(data=cetvrti_balkon, color="lightcoral")
```

[16]:
```
<Axes: xlabel='posjeduje balkon'>
```



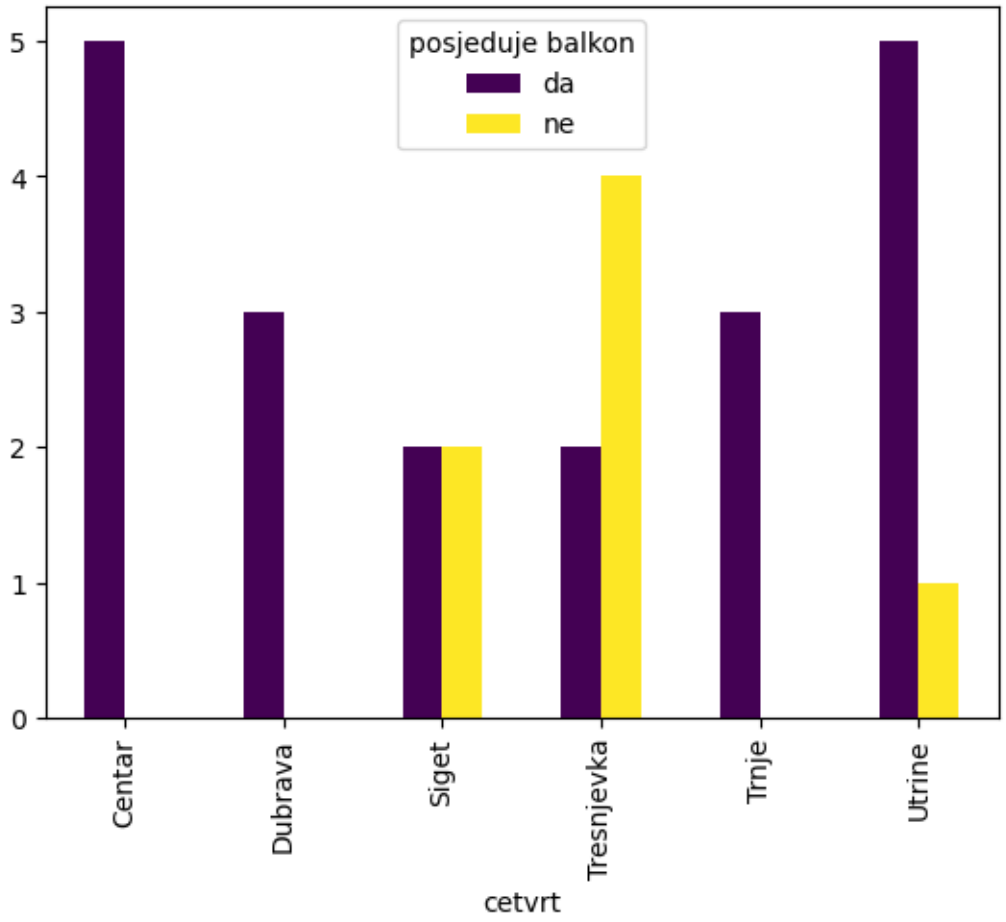
[17]:
```
sns.barplot(data=cetvrti_balkon)
```

[17]:
```
<Axes: xlabel='posjeduje balkon'>
```



[18]:
```
cetvrti_balkon.plot(kind='bar', ax=plt.gca(), cmap='viridis')
```

[18]:
```
<Axes: xlabel='cetvrt'>
```


posjeduje balkon
da
ne
5
4
3
2
1
0
Centar
Dubrava
Siget
Tresnjevka
Trnje
Utrine
cetvrt

[ ]: