

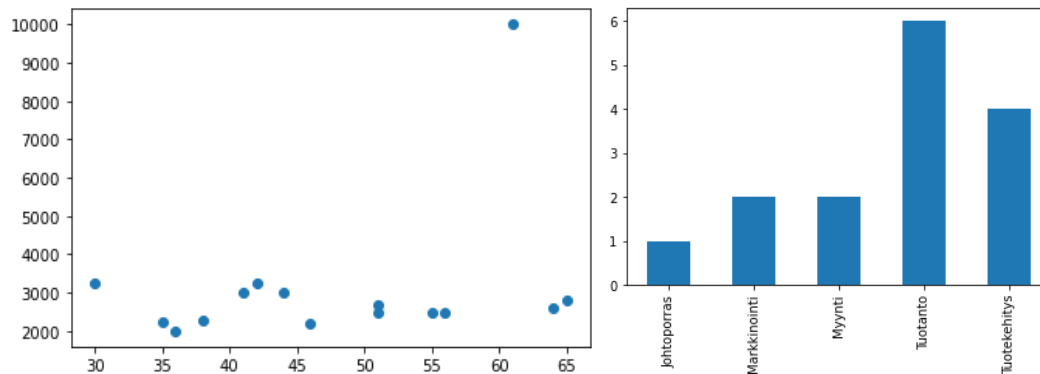
# 5G00ET68-3001 Data-analyysi ja tekoälyn perusteet

1

```
plt.scatter(x=df['age'], y=df['salary'])
plt.show()

dep_counts = df['dname'].value_counts().sort_index()
dep_counts.plot(kind='bar')
plt.show()

dep_counts.plot(kind='barh')
plt.show()
```

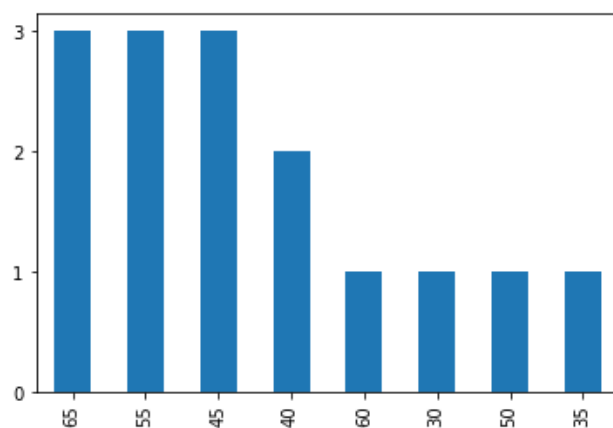


2

```
agc = df['age_group'].value_counts()
agc.plot(kind='bar')

max_count = range(agc.max() + 1)

plt.gca().yaxis.set_major_locator(plt.MultipleLocator(1))
plt.show()
```



3

```
gvc = df['gender'].value_counts()
gvc.plot(kind='pie', ylabel='', labels=['miehet', 'naiset'],
         startangle=270, autopct='%1.1f%%')
plt.show()

cag = df.groupby(['age_group', 'gender']).size().unstack()
fig, ax = plt.subplots()
ax = cag.plot(kind='bar')
ax.legend(['miehet', 'naiset'])
plt.title('Työntekijät ikäryhmittäin')
plt.ylabel('Lukumäärä')
plt.xlabel('Ikäryhmä')
plt.gca().yaxis.set_major_locator(plt.MultipleLocator(1))
plt.show()
```

