In [2]:
```
#Visualize the data using Python libraries matplotlib, seaborn by plotting the graphs for assignment no. 2 and 3 ( Group B)

#import dependencies

import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
import pandas as pd
```

In [3]:
```
df= pd.read_csv('heartdisease.csv')
```

In [4]:
```
df.head(5)
```

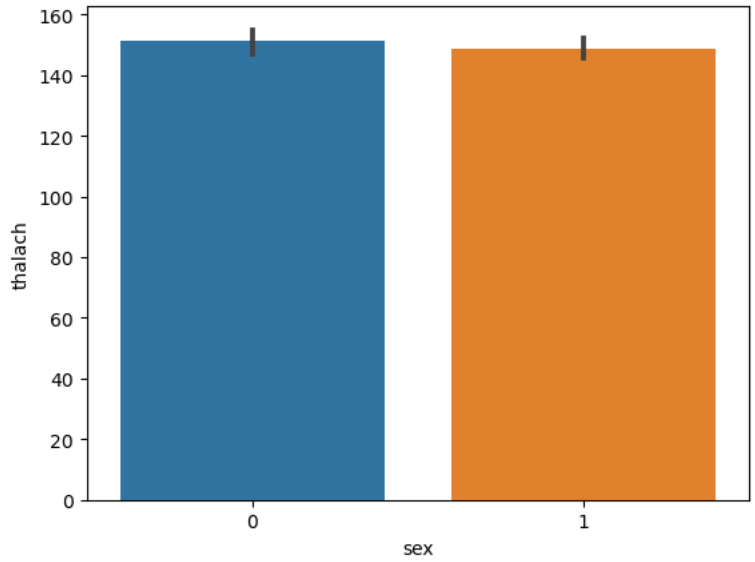
Out[4]:

	age	sex	cp	trestbps	chol	fbs	restecg	thalach	exang	oldpeak	slope	ca	thal	num
0	63	1	1	145	233	1	2	150	0	2.3	3	0	6	0
1	67	1	4	160	286	0	2	108	1	1.5	2	3	3	2
2	67	1	4	120	229	0	2	129	1	2.6	2	2	7	1
3	37	1	3	130	250	0	0	187	0	3.5	3	0	3	0
4	41	0	2	130	204	0	2	172	0	1.4	1	0	3	0

In [6]:
```
```

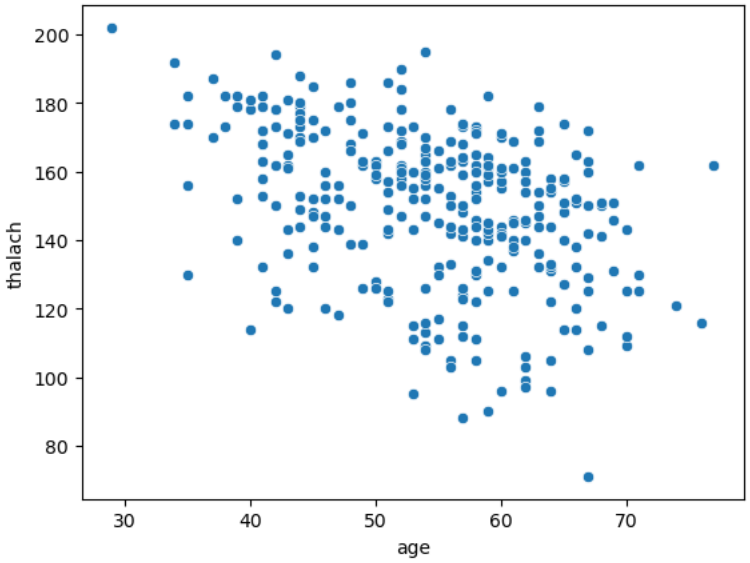
In [18]:
```
#Barplot using seaborn
sns.barplot(x='sex', y='thalach', data = df)
```

Out[18]:
```
<AxesSubplot:xlabel='sex', ylabel='thalach'>
```



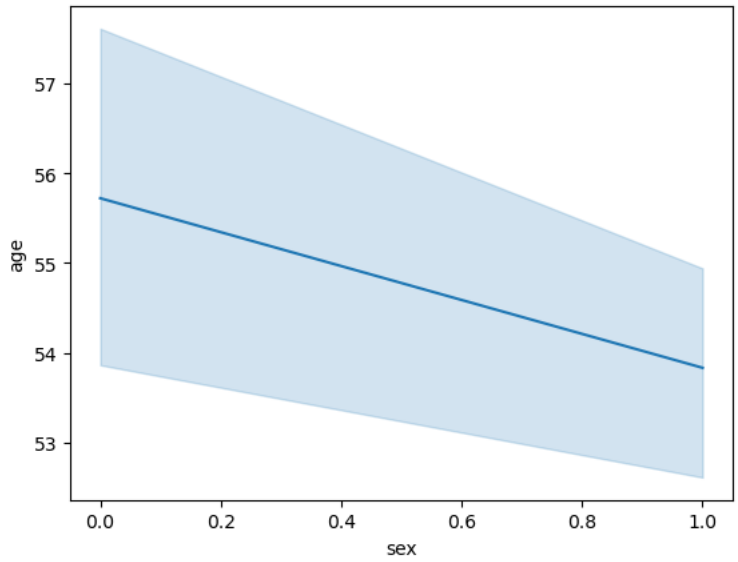
In [20]:
```
#ScatterPlot using seaborn
sns.scatterplot(x='age', y='thalach', data = df)
```

Out[20]: <AxesSubplot:xlabel='age', ylabel='thalach'>



In [17]:
```
#Lineplot using seaborn
sns.lineplot(x='sex', y='age', data = df)
```

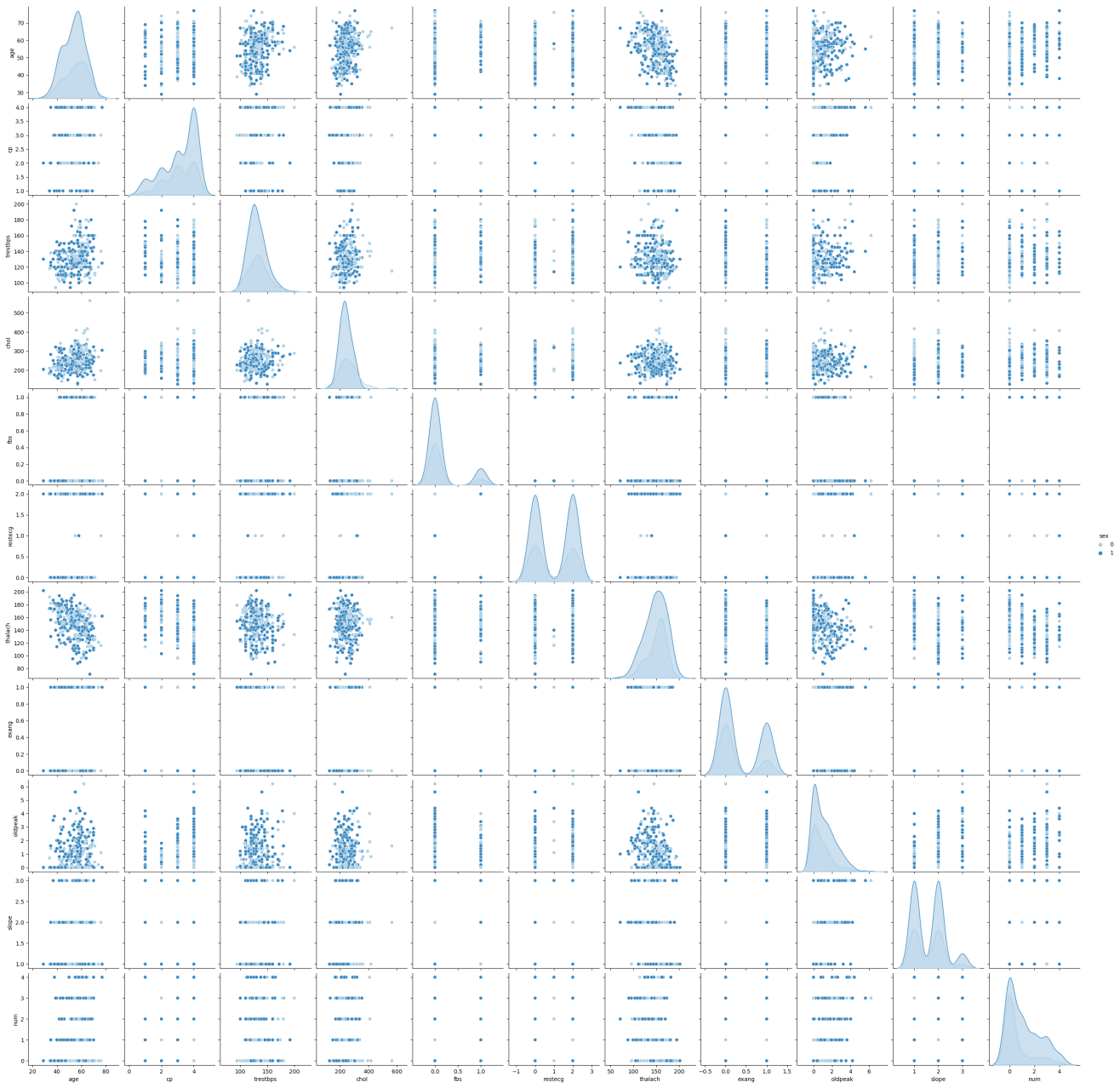
Out[17]: <AxesSubplot:xlabel='sex', ylabel='age'>



In [29]:
```
#Pairplot using seaborn
plt.figure(figsize=(12,12))
sns.pairplot(df, hue= 'sex' , palette = 'Blues')
```

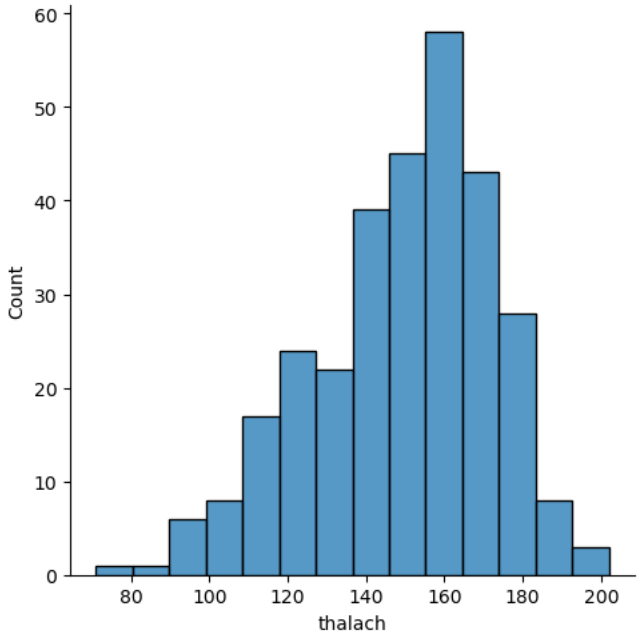
Out[29]:
```
<seaborn.axisgrid.PairGrid at 0xde46aadfd0>

<Figure size 1200x1200 with 0 Axes>
```

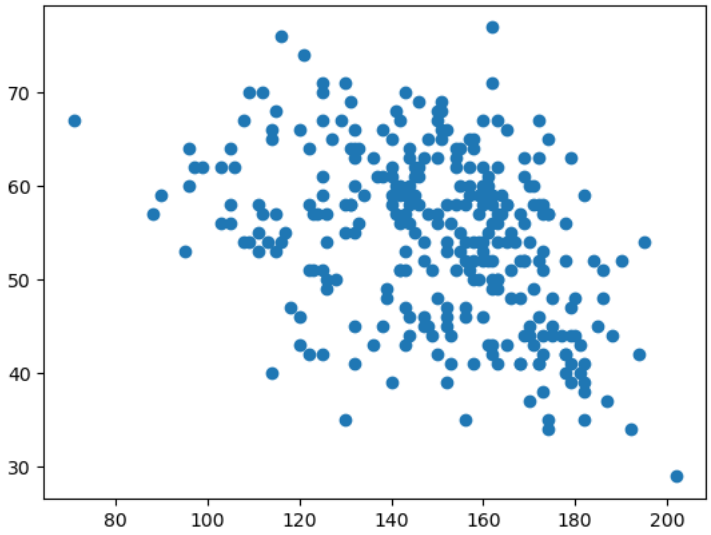


In [25]:
```
#Displot using seaborn
sns.displot(df['thalach'])
```

Out[25]:
```
<seaborn.axisgrid.FacetGrid at 0xde2fc6dd60>
```



In [35]:
```
#ScatterPlot using Matplotlib
plt.scatter(df['thalach'], df['age'])
plt.show()
```



In [ ]:

In [ ]:

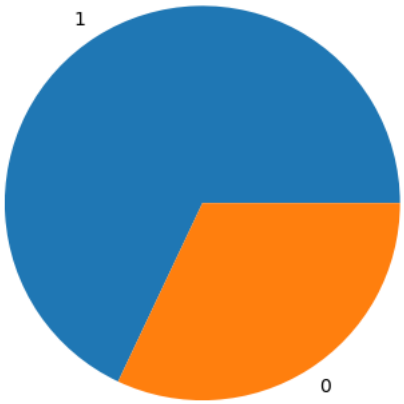
In [45]:
```
#PiePlot using Matplotlib
sex_df = pd.DataFrame(df['sex'].value_counts())
sex_df
```

Out[45]:

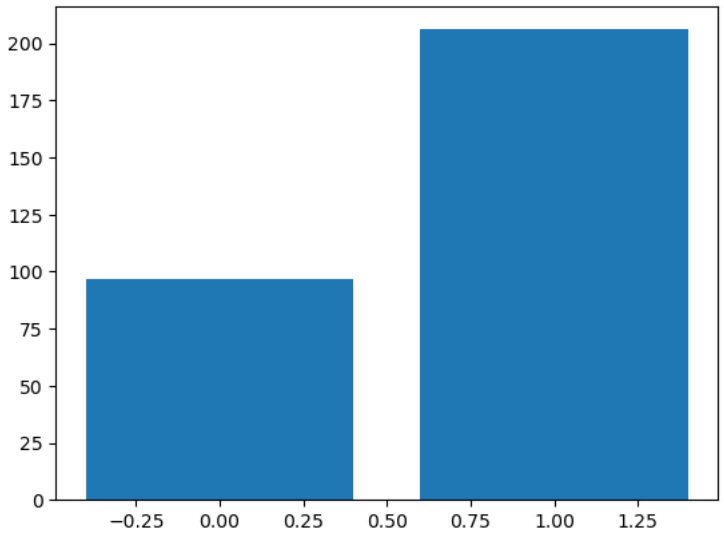
	sex
1	206
0	97

In [46]:
```
plt.pie(sex_df['sex'], labels = sex_df.index)
```

Out[46]:
```
([<matplotlib.patches.Wedge at 0xde3716a3d0>,
  <matplotlib.patches.Wedge at 0xde3716a850>],
 [Text(-0.5890242258008583, 0.9290050922463771, '1'),
  Text(0.5890242258008579, -0.9290050922463774, '0')])
```



In [47]:
```
#Barplot using Matplotlib
plt.bar(sex_df.index, sex_df['sex'])
plt.show()
```



In [ ]: