Importing header files

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

Exporting dataset

In [2]:
```
dr=pd.read_csv("C:/Users/ACER/Desktop/New folder/heart.csv")
```

In [3]:
```
dr.head(50)
```

Out[3]:

	age	sex	cp	trestbps	chol	fbs	restecg	thalach	exang	oldpeak	slope	ca	thal	target
0	63	1	3	145	233	1	0	150	0	2.3	0	0	1	1
1	37	1	2	130	250	0	1	187	0	3.5	0	0	2	1
2	41	0	1	130	204	0	0	172	0	1.4	2	0	2	1
3	56	1	1	120	236	0	1	178	0	0.8	2	0	2	1
4	57	0	0	120	354	0	1	163	1	0.6	2	0	2	1
5	57	1	0	140	192	0	1	148	0	0.4	1	0	1	1
6	56	0	1	140	294	0	0	153	0	1.3	1	0	2	1
7	44	1	1	120	263	0	1	173	0	0.0	2	0	3	1
8	52	1	2	172	199	1	1	162	0	0.5	2	0	3	1
9	57	1	2	150	168	0	1	174	0	1.6	2	0	2	1
10	54	1	0	140	239	0	1	160	0	1.2	2	0	2	1
11	48	0	2	130	275	0	1	139	0	0.2	2	0	2	1
12	49	1	1	130	266	0	1	171	0	0.6	2	0	2	1
13	64	1	3	110	211	0	0	144	1	1.8	1	0	2	1
14	58	0	3	150	283	1	0	162	0	1.0	2	0	2	1
15	50	0	2	120	219	0	1	158	0	1.6	1	0	2	1
16	58	0	2	120	340	0	1	172	0	0.0	2	0	2	1
17	66	0	3	150	226	0	1	114	0	2.6	0	0	2	1
18	43	1	0	150	247	0	1	171	0	1.5	2	0	2	1
19	69	0	3	140	239	0	1	151	0	1.8	2	2	2	1
20	59	1	0	135	234	0	1	161	0	0.5	1	0	3	1
21	44	1	2	130	233	0	1	179	1	0.4	2	0	2	1
22	42	1	0	140	226	0	1	178	0	0.0	2	0	2	1
23	61	1	2	150	243	1	1	137	1	1.0	1	0	2	1

	age	sex	cp	trestbps	chol	fbs	restecg	thalach	exang	oldpeak	slope	ca	thal	target
24	40	1	3	140	199	0	1	178	1	1.4	2	0	3	1
25	71	0	1	160	302	0	1	162	0	0.4	2	2	2	1
26	59	1	2	150	212	1	1	157	0	1.6	2	0	2	1
27	51	1	2	110	175	0	1	123	0	0.6	2	0	2	1
28	65	0	2	140	417	1	0	157	0	0.8	2	1	2	1
29	53	1	2	130	197	1	0	152	0	1.2	0	0	2	1
30	41	0	1	105	198	0	1	168	0	0.0	2	1	2	1
31	65	1	0	120	177	0	1	140	0	0.4	2	0	3	1
32	44	1	1	130	219	0	0	188	0	0.0	2	0	2	1
33	54	1	2	125	273	0	0	152	0	0.5	0	1	2	1
34	51	1	3	125	213	0	0	125	1	1.4	2	1	2	1
35	46	0	2	142	177	0	0	160	1	1.4	0	0	2	1
36	54	0	2	135	304	1	1	170	0	0.0	2	0	2	1
37	54	1	2	150	232	0	0	165	0	1.6	2	0	3	1
38	65	0	2	155	269	0	1	148	0	0.8	2	0	2	1
39	65	0	2	160	360	0	0	151	0	0.8	2	0	2	1
40	51	0	2	140	308	0	0	142	0	1.5	2	1	2	1
41	48	1	1	130	245	0	0	180	0	0.2	1	0	2	1
42	45	1	0	104	208	0	0	148	1	3.0	1	0	2	1
43	53	0	0	130	264	0	0	143	0	0.4	1	0	2	1
44	39	1	2	140	321	0	0	182	0	0.0	2	0	2	1
45	52	1	1	120	325	0	1	172	0	0.2	2	0	2	1
46	44	1	2	140	235	0	0	180	0	0.0	2	0	2	1
47	47	1	2	138	257	0	0	156	0	0.0	2	0	2	1
48	53	0	2	128	216	0	0	115	0	0.0	2	0	0	1
49	53	0	0	138	234	0	0	160	0	0.0	2	0	2	1

Collecting the sufficient data

In [4]:
```
subdf=dr[["age","sex","chol"]]
```

Here for sex 0=male and 1=female

In [5]:
```
subdf.head(50)
```

Out[5]:

	age	sex	chol
0	63	1	233

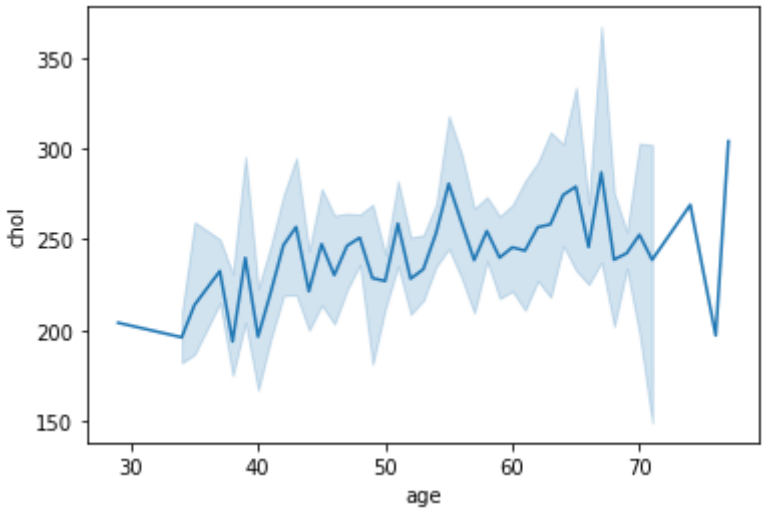
	age	sex	chol
1	37	1	250
2	41	0	204
3	56	1	236
4	57	0	354
5	57	1	192
6	56	0	294
7	44	1	263
8	52	1	199
9	57	1	168
10	54	1	239
11	48	0	275
12	49	1	266
13	64	1	211
14	58	0	283
15	50	0	219
16	58	0	340
17	66	0	226
18	43	1	247
19	69	0	239
20	59	1	234
21	44	1	233
22	42	1	226
23	61	1	243
24	40	1	199
25	71	0	302
26	59	1	212
27	51	1	175
28	65	0	417
29	53	1	197
30	41	0	198
31	65	1	177
32	44	1	219
33	54	1	273
34	51	1	213
35	46	0	177
36	54	0	304

	age	sex	chol
37	54	1	232
38	65	0	269
39	65	0	360
40	51	0	308
41	48	1	245
42	45	1	208
43	53	0	264
44	39	1	321
45	52	1	325
46	44	1	235
47	47	1	257
48	53	0	216
49	53	0	234

Plotting the line graph with x axis with age and y axis with cholestrol rate

In [8]:
```
sns.lineplot(x="age",y="chol",data=dr)
```

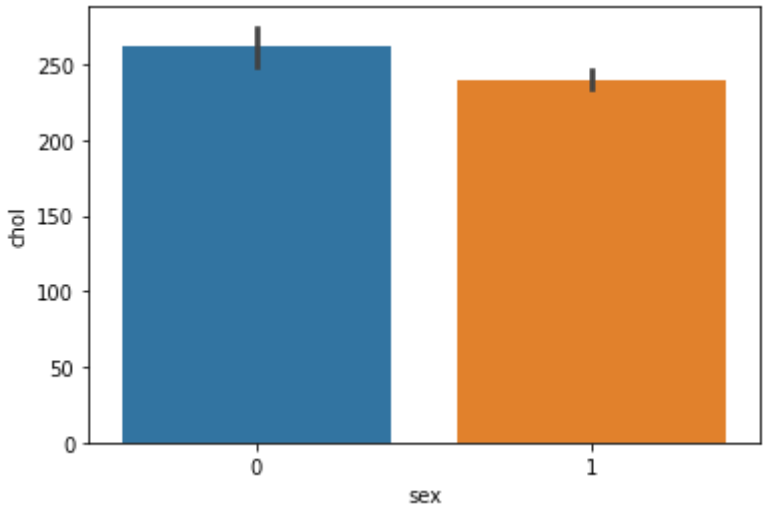
Out[8]:
```
<AxesSubplot:xlabel='age', ylabel='chol'>
```



Plotting the bar graph with x axis gender and y axis cholestrol rate

In [10]:
```
sns.barplot(x="sex",y="chol",data=dr)
```

Out[10]:
```
<AxesSubplot:xlabel='sex', ylabel='chol'>
```



Inference

The dataset on rate of cholestrol on the basis of age and gender is interpreted here.From the first line graph,we can infer that cholestrol rate is high for the people between age group 60-70 and from the bar graph we can conclude that male has the higher possibility of having higher cholestrol rate.That is,male between age group of 60-70 has more chance of having higher cholestrol rate.