

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

In [6]:

```
A = pd.read_csv(r'C:\Users\hp\OneDrive\Desktop\heart.csv')
A.head()
```

Out[6]:

	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

In [7]:

```
A.isnull().sum()
```

Out[7]:

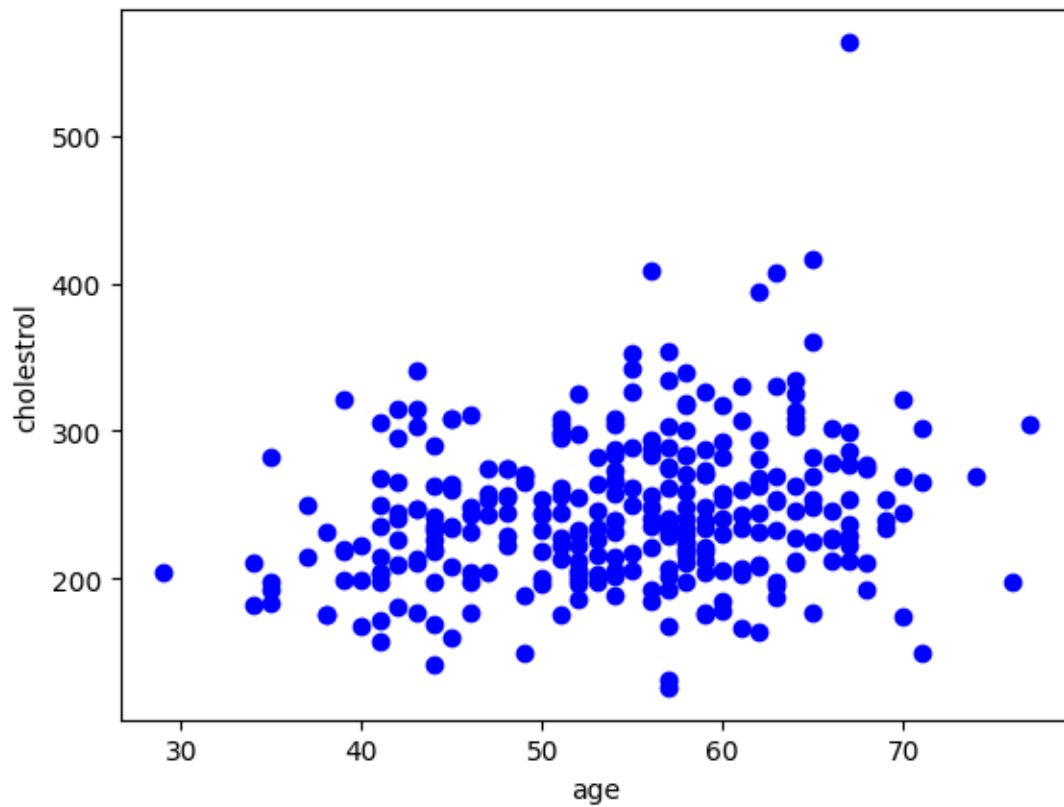
```
age      0
sex      0
cp       0
trestbps 0
chol     0
fbs      0
restecg  0
thalach  0
exang    0
oldpeak  0
slope    0
ca       0
thal     0
target   0
dtype: int64
```

In [9]:

```
#Scatter Plot
x = A['age']
y = A['chol']
plt.scatter(x,y,color='blue')
plt.xlabel('age')
plt.ylabel('cholesterol')
```

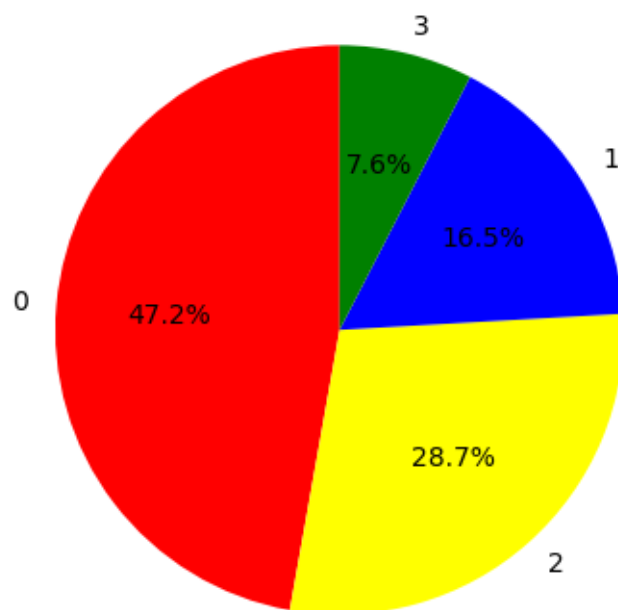
Text(0, 0.5, 'cholesterol')

Out[9]:



```
cp_counts = A['cp'].value_counts()
plt.pie(cp_counts, labels=cp_counts.index, autopct='%1.1f%%', startangle=90,
        colors=['red', 'yellow', 'blue', 'green'])
plt.show()
```

In [14]:



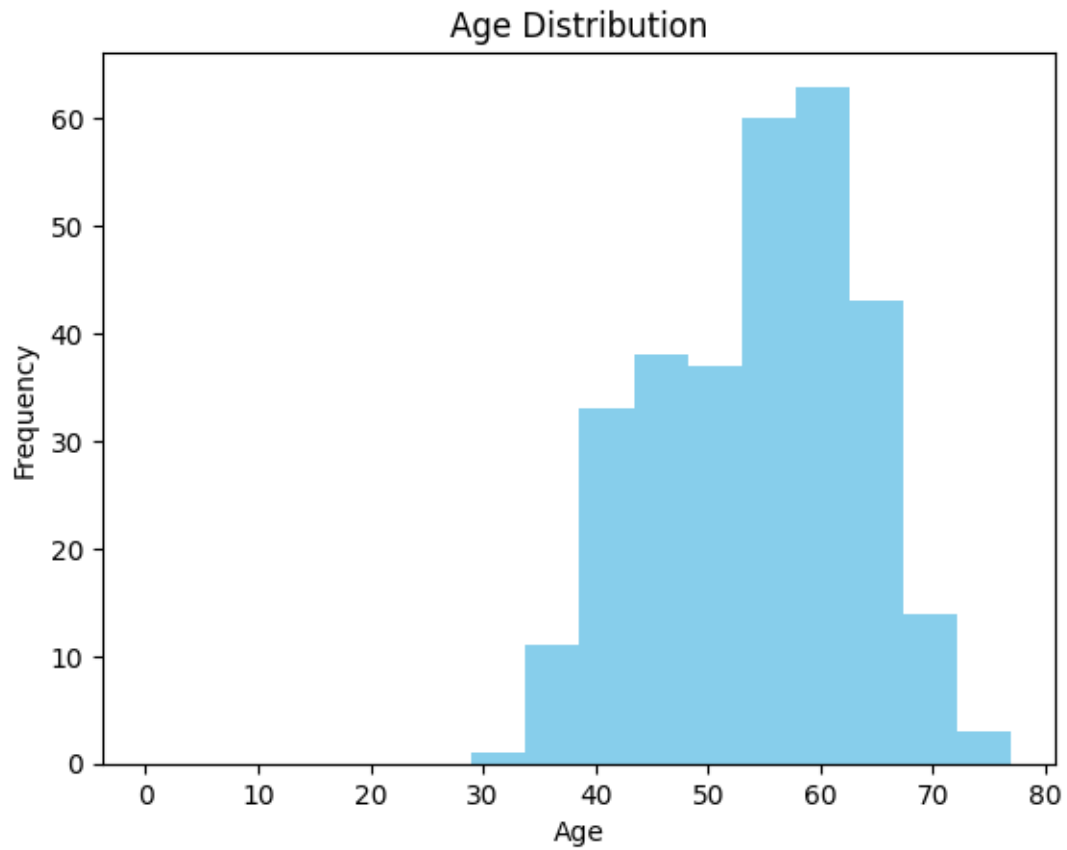
plt.plot(2, 3, 1)

In [15]:

```
plt.hist(A['age'],color='skyblue')
plt.title('Age Distribution')
plt.xlabel('Age')
plt.ylabel('Frequency')
```

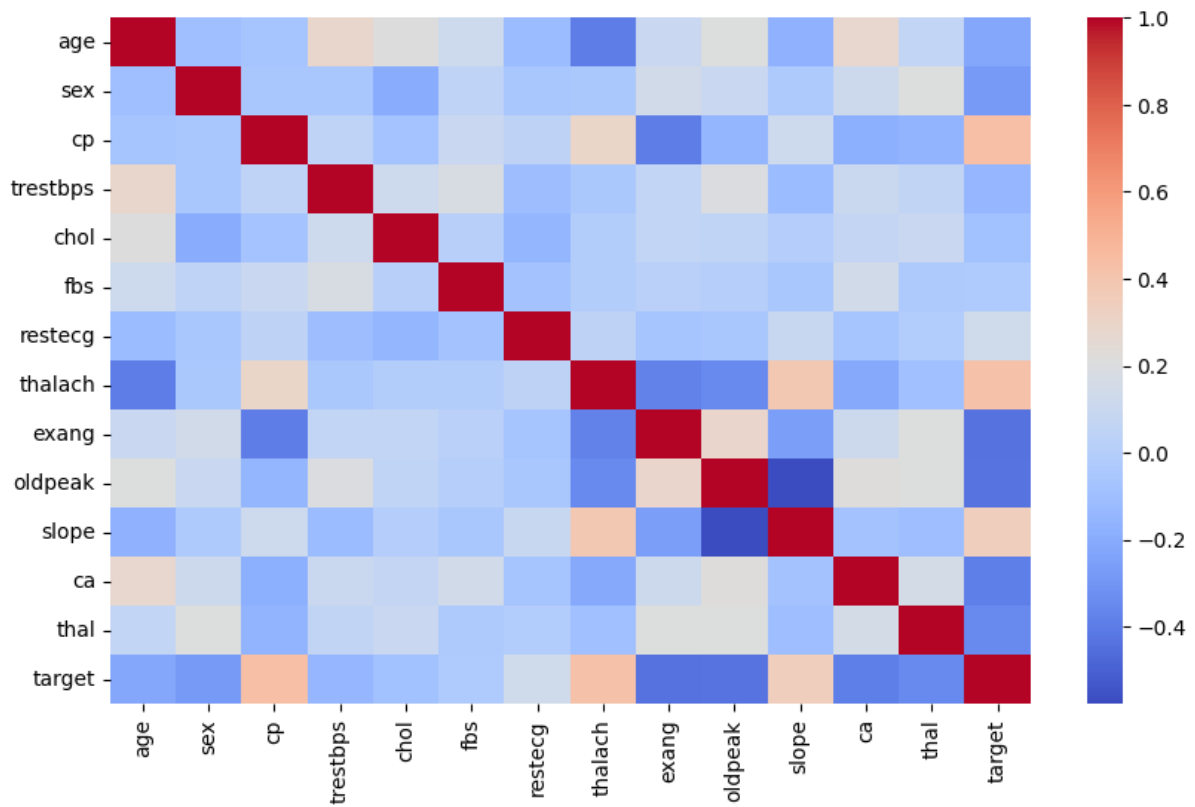
Out[15]:

```
Text(0, 0.5, 'Frequency')
```



In [16]:

```
fig, ax = plt.subplots(figsize=(10,6))
sns.heatmap(A.corr(),cmap='coolwarm')
plt.show()
```



```
sns.countplot(Data, x = 'cp')
plt.show()
```

```
sns.displot(Data['age'], bin = 20)
plt.show()
```