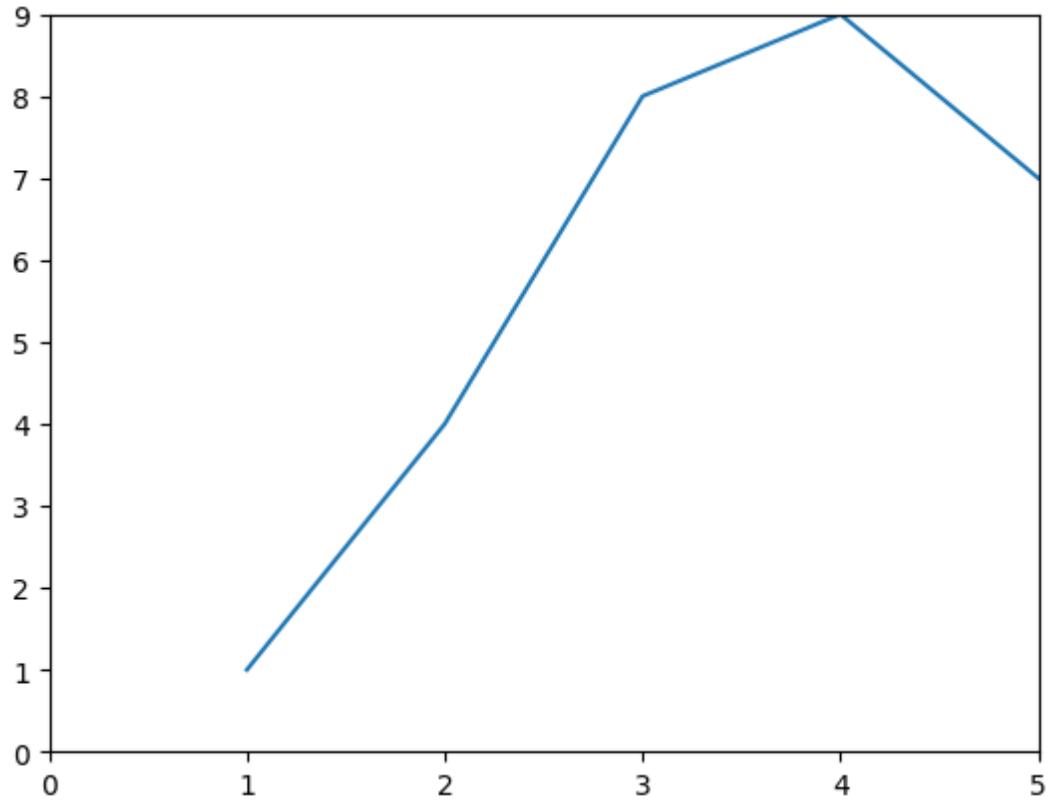
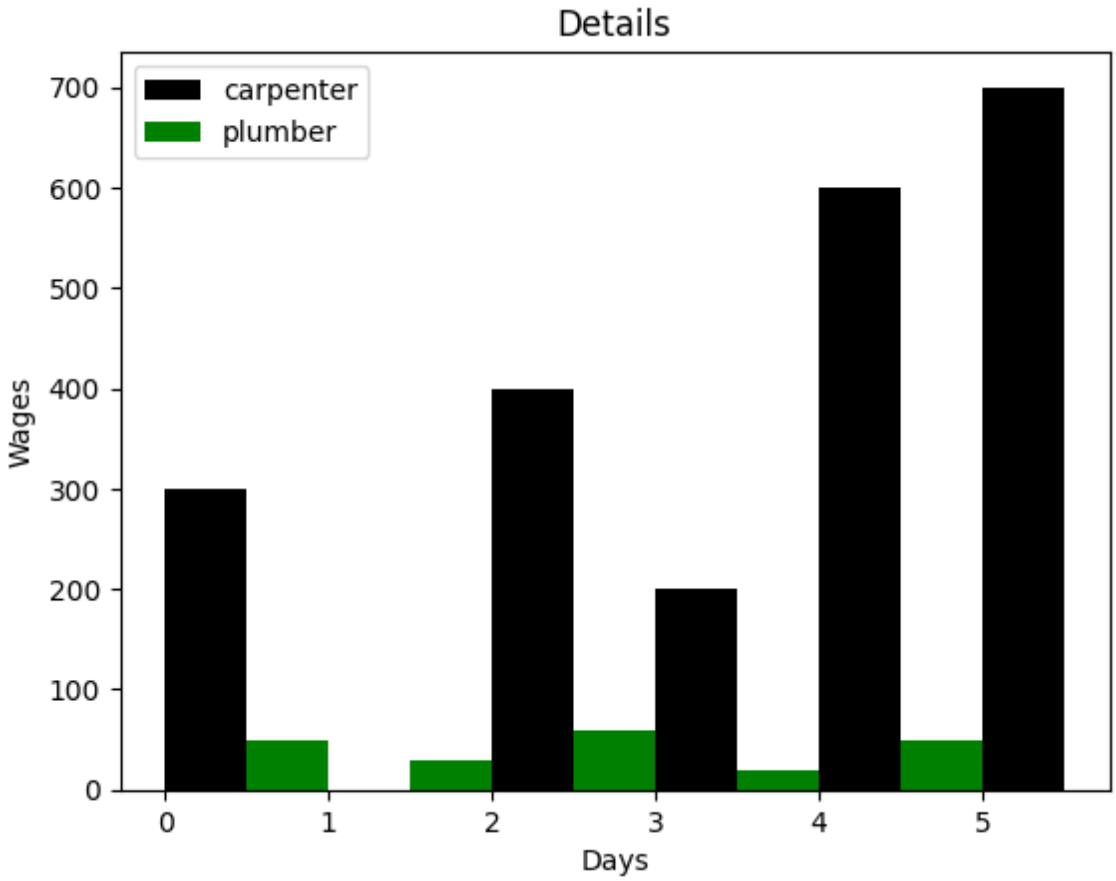
In [5]:

```
#Line chart
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
plt.plot([1,2,3,4,5,],[1,4,8,9,7])
plt.axis([0,5,0,9])
plt.show()
```



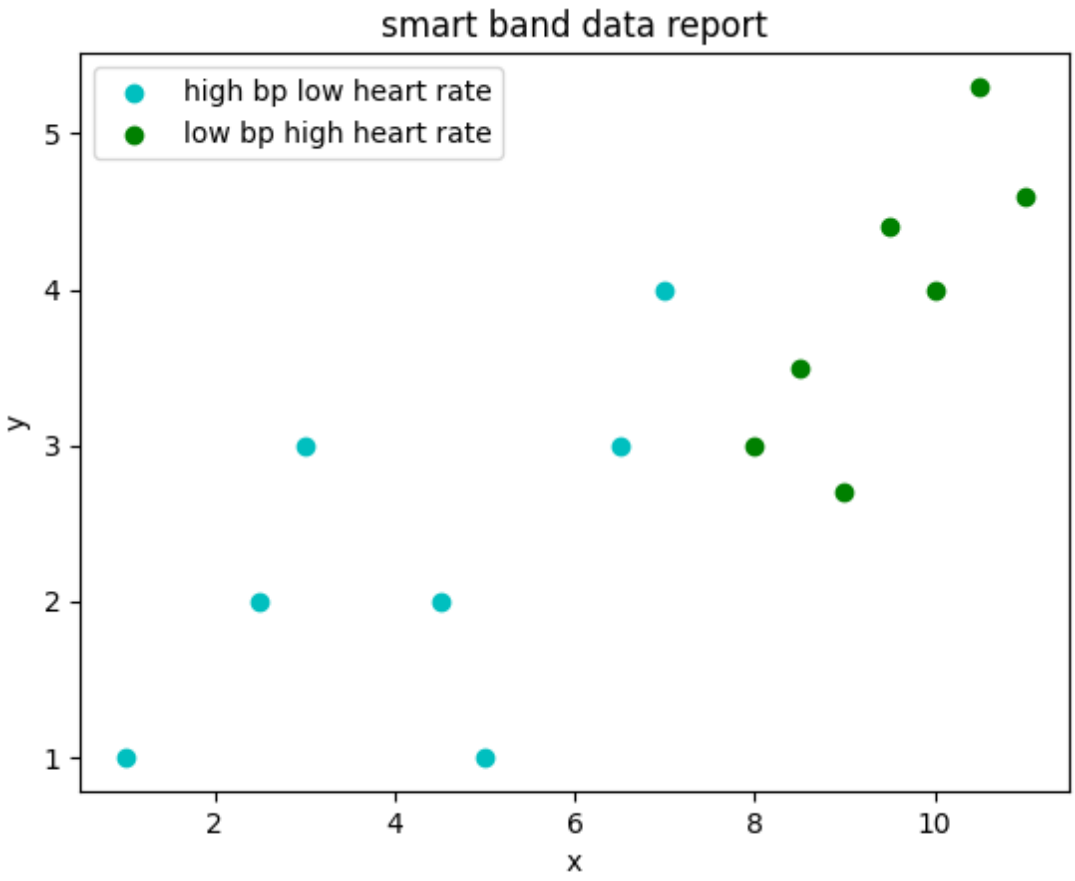
In [6]:

```
#bar plot
plt.bar([0.25,2.25,3.25,4.25,5.25],[300,400,200,600,700],label='carpenter',color='k',width=
plt.bar([0.75,1.75,3.75,4.75,2.75],[50,30,20,50,60],label='plumber',color='g',width=0.5)
plt.legend()
plt.xlabel("Days")
plt.ylabel("Wages")
plt.title("Details")
plt.show()
```



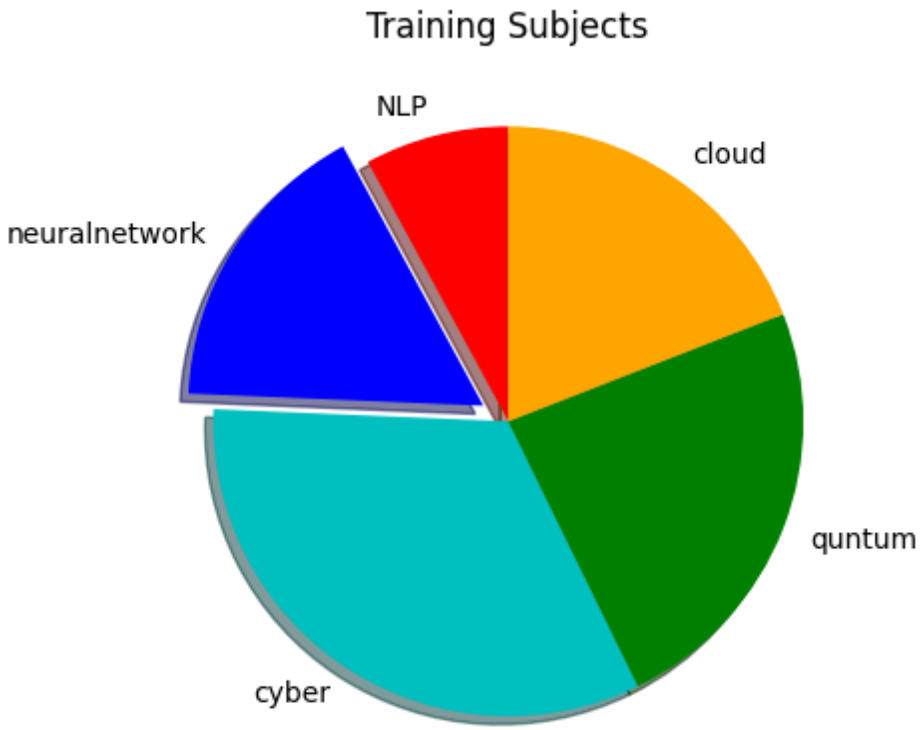
In [8]:

```
#scatter plot
x1=[1,2.5,3,4.5,5,6.5,7]
y1=[1,2,3,2,1,3,4]
x2=[8,8.5,9,9.5,10,10.5,11]
y2=[3,3.5,2.7,4.4,4,5.3,4.6]
plt.scatter(x1,y1,label='high bp low heart rate',color='c')
plt.scatter(x2,y2,label='low bp high heart rate',color='g')
plt.title("smart band data report")
plt.xlabel("x")
plt.ylabel('y')
plt.legend()
plt.show()
```



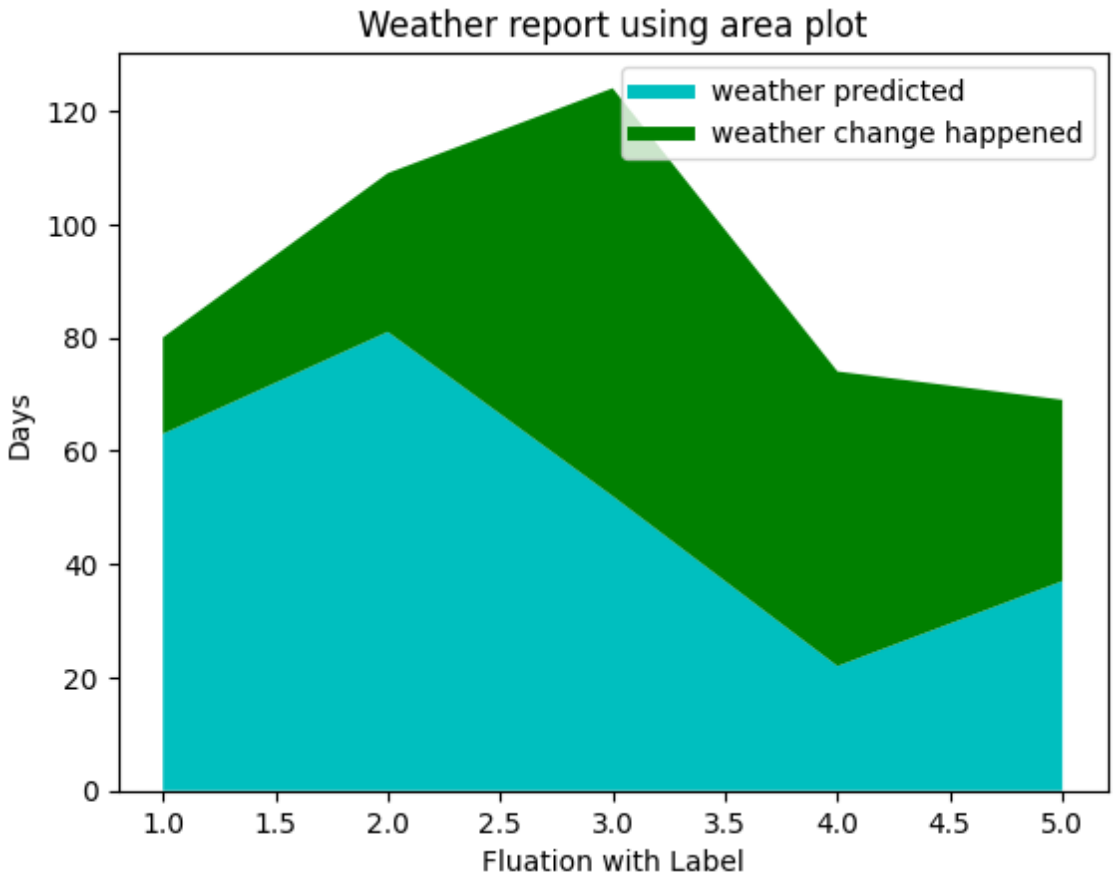
In [36]:

```
#pie chart
slice=[12,25,50,36,29]
acivities=["NLP","neuralnetwork","cyber","quntum","cloud"]
cols=["r","b","c","g","orange"]
plt.pie(slice,labels=acivities,colors=cols,startangle=90,shadow=True,explode=(0,0.1,0,0,0));
plt.title('Training Subjects')
plt.show()
```



In [37]:

```
#Area plot
days=[1,2,3,4,5]
age=[63,81,52,22,37]
weight=[17,28,72,52,32]
plt.plot([],[],color='c',label='weather predicted',linewidth=5)
plt.plot([],[],color='g',label='weather change happened',linewidth=5)
plt.stackplot(days,age,weight,colors=['c','g'])
plt.xlabel('Fluation with Label')
plt.ylabel('Days')
plt.title('Weather report using area plot')
plt.legend()
plt.show()
```



In [38]:

```
#histogram
pop=[22,55,62,45,21,22,34,42,42,4,2,8]
bins=[1,10,20,30,40,50]
plt.hist(pop,bins,rwidth=0.6)
plt.xlabel('agegroups')
plt.ylabel('Number of peple')
plt.title('Histogram')
plt.show()
```