In [7]:
```python
import pandas as pd
import matplotlib.pyplot as plt
data={'Year':list(range(2010,2021)),'Job Postings':[150,300,450,600,800,1200,1(
df=pd.DataFrame(data)
plt.plot(df['Year'],df['Job Postings'],marker='o')
plt.title('Trend of Data Science Job Postings')
plt.xlabel('Year')
plt.ylabel('Number of Job Postings')
plt.show()
```
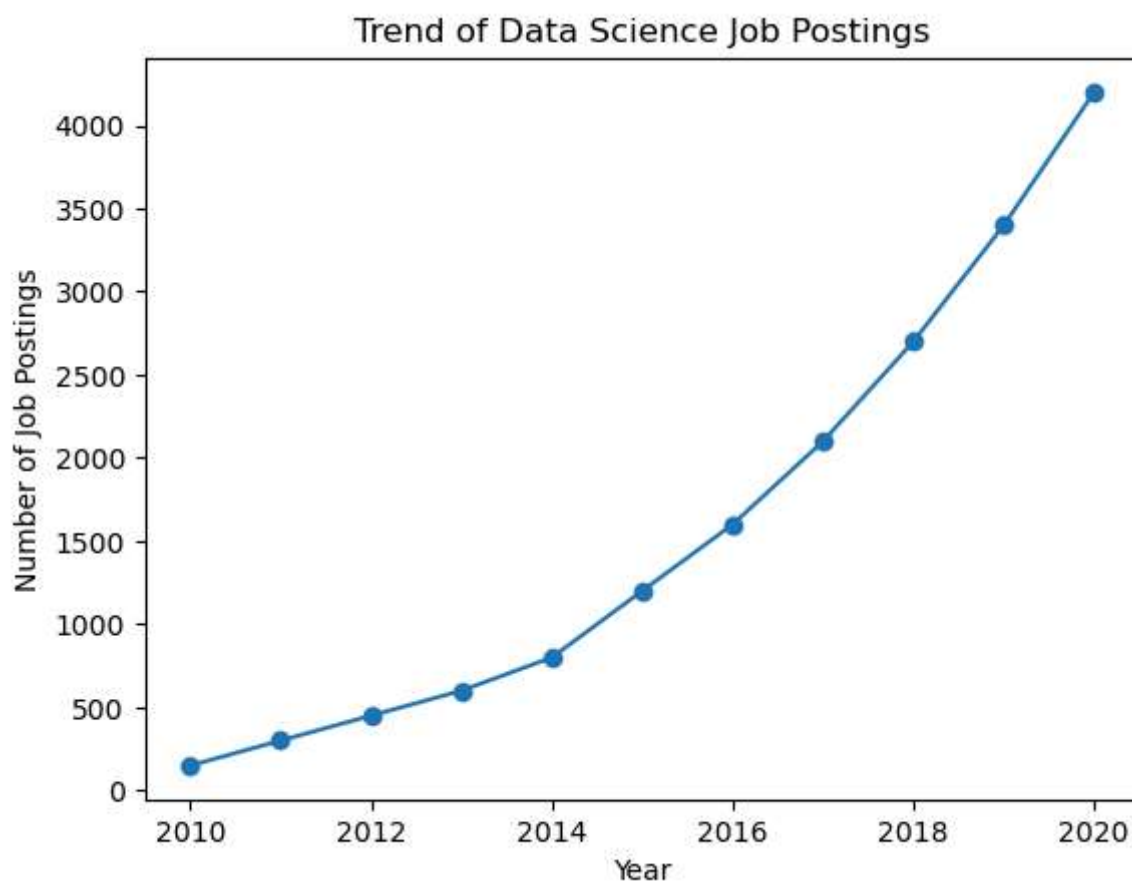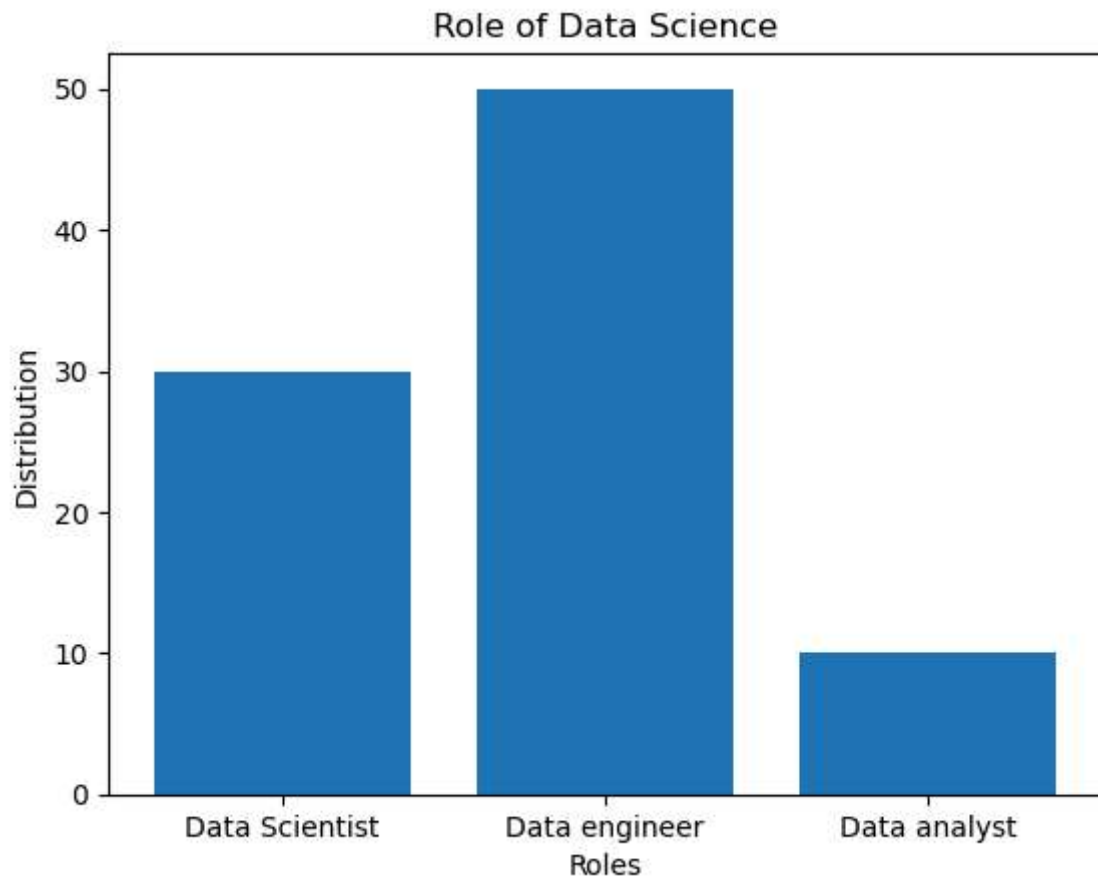

Trend of Data Science Job Postings

In [11]:
```python
import pandas as pd
import matplotlib.pyplot as plt
name=['Data Scientist','Data engineer','Data analyst']
data=[30,50,10]
plt.bar(name,data)
plt.title('Role of Data Science')
plt.xlabel('Roles')
plt.ylabel('Distribution')
plt.show()
```

In [1]:
```python
import pandas as pd
import matplotlib.pyplot as plt
name=['Data Scientist','Data Analyst','Data Engineer','ML Engineer']
data=[30,50,10,20]
plt.pie(data,labels=name,colors=['lightblue','pink','yellow','lightgreen'])
plt.title('Role of Data Science')
plt.legend()
plt.show()
```

Role of Data Science
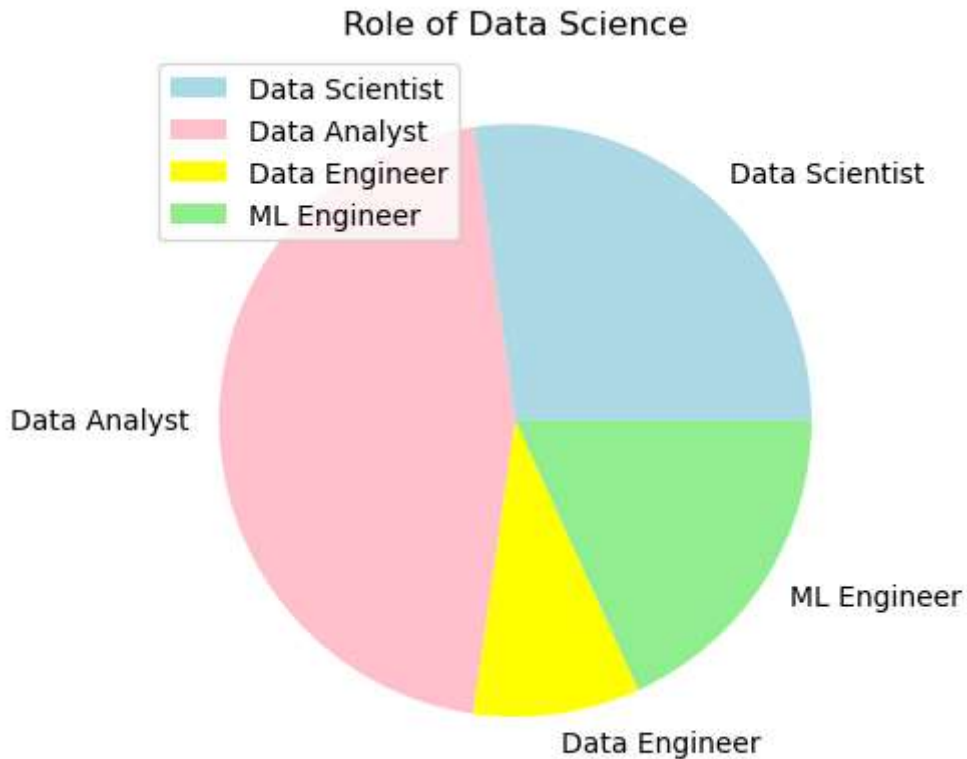
In [1]:
```python
import pandas as pd
import matplotlib.pyplot as plt
structured_data=pd.DataFrame({'ID':[1,2,3],'Name':['Alice','Bob','Charles'],
                              'age':[25,30,35]})
print("Structured Data:\n",structured_data)
unstructured_data="This is an example of unstructured data.it can be a piece o
print("\nUnstructured Data:\n",unstructured_data)
semi_structured_data={'ID':1,'Name':'Alice','Attributes':{'height':165,'Weight
print("semi_structured_data:\n",semi_structured_data)
```

```
Structured Data:
    ID     Name  age
0   1    Alice   25
1   2      Bob   30
2   3  Charles   35

Unstructured Data:
 This is an example of unstructured data.it can be a piece of text,an image o
r a video file.
semi_structured_data:
 {'ID': 1, 'Name': 'Alice', 'Attributes': {'height': 165, 'Weights': 68}}
```

In [ ]: