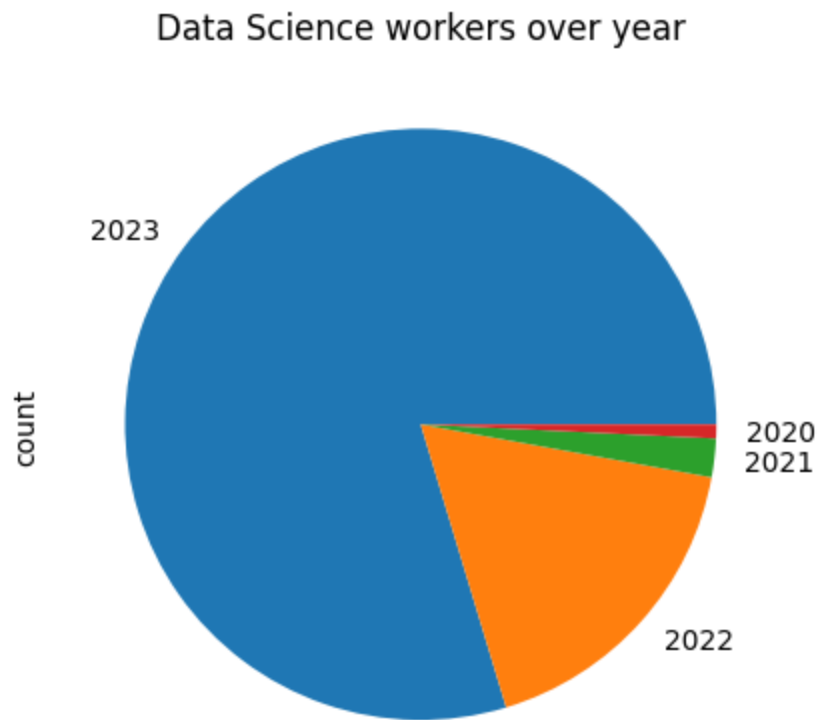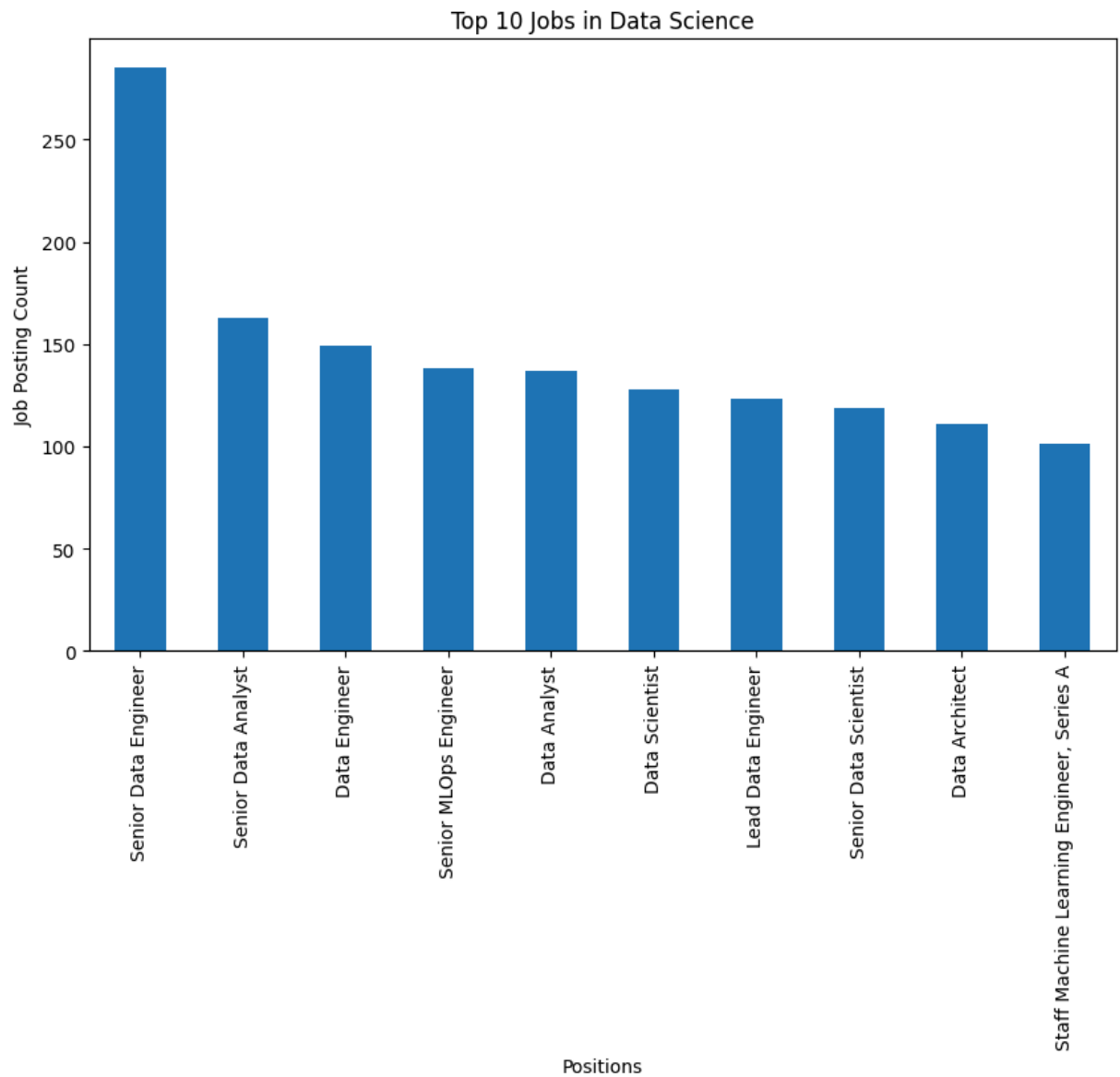```
In [8]: import pandas as pd
        import numpy as np
        import matplotlib.pyplot as plt
        %matplotlib inline

        df = pd.read_csv("jobs_in_data.csv")
        years = df['work_year'].value_counts()
        years.plot(kind='pie')
        plt.title('Data Science workers over year')
        plt.show()
```

Data Science workers over year



```
In [10]: datas = pd.read_csv("job_postings.csv")
         top_n = 10
         top_positions = datas['job_title'].value_counts()[:top_n]
         plt.figure(figsize=(top_n, 6))
         top_positions.plot(kind='bar')
         plt.xlabel('Positions')
         plt.ylabel('Job Posting Count')
         plt.title('Top ' + str(top_n) + ' Jobs in Data Science')
         plt.show()
```

Top 10 Jobs in Data Science

In [11]:
```python
datas = {
    "Names": ["Prince", "Ram", "Pitty", "Rohan", "Rakesh"],
    "Marks": [90, 80, 70, 60, 50]
}
df = pd.DataFrame(datas)
print("Structured data:")
print(df, "\n")
print("Semi structured data:")
print(datas, "\n")
print("Unstructured data:")
print("Prince got 90 marks, Ram got 80 marks.")
```

```
Structured data:
      Names   Marks
0   Prince      90
1      Ram      80
2    Pitty      70
3    Rohan      60
4   Rakesh      50

Semi structured data:
{'Names': ['Prince', 'Ram', 'Pitty', 'Rohan', 'Rakesh'], 'Marks': [90, 80, 70, 60, 5
0]}

Unstructured data:
Prince got 90 marks, Ram got 80 marks.
```

In [14]:
```python
from cryptography.fernet import Fernet

# create a key
key = Fernet.generate_key()
print(f"Generated Key: {key.decode()}")

# Create a Fernet object
cipher = Fernet(key)

# Encript the data
sensitive_data = "This is some top-secret information."
encrypted_data = cipher.encrypt(sensitive_data.encode())
print(f"Encrypted Data: {encrypted_data.decode()}")

# Decript the data
decrypted_data = cipher.decrypt(encrypted_data)
print(f"Decrypted Data: {decrypted_data.decode()}")
```

```
Generated Key: GcTdjHSuakspXOo5-KCYPqrOhnWyI3zQUW33_mKHk6I=
Encrypted Data: gAAAAABpCfjP3X3GbXjV2GdBpb_Jp6O96TUwxt_XKK1MC-eoGgCkfq_1nogIRUHEMmQM
dQPbVmfdJJ4Gqz6d8V6l_Vpl3YR79FQ4m-bUoYuwxmNhAfZnBBrp_Mb1ibJu3xFiDrCfLS7S
Decrypted Data: This is some top-secret information.
```