Write a Pandas program to split the following data frame into groups based on Class and count the number of students in that particular class. Also generate a bar chart based on the result and explain the conclusion.

import pandas as pd

import matplotlib.pyplot as plt

Creating the DataFrame

student_data = pd.DataFrame({

   'school_code': ['s001', 's002', 's003', 's001', 's002', 's004'],

   'class': ['V', 'VI', 'VI', 'VI', 'V', 'VI'],

   'name': ['Alberto Franco', 'Gino Mcneill', 'Ryan Parkes', 'Eesha Hinton', 'Gino Mcneill', 'David Parkes'],

   'age': [12, 12, 13, 13, 14, 12],

   'height': [173, 192, 186, 167, 151, 159],

   'weight': [35, 32, 33, 30, 31, 32],

   'address': ['street1', 'street2', 'street3', 'street1', 'street2', 'street4']

})

Grouping the data by 'class' and counting the number of students in each class

class_counts = student_data.groupby('class')['name'].count()

Displaying the result

print("Number of students in each class:")

print(class_counts)

Generating a bar chart

```python
class_counts.plot(kind='bar', color='skyblue', edgecolor='black')

plt.title('Number of Students in Each Class')

plt.xlabel('Class')

plt.ylabel('Number of Students')

plt.xticks(rotation=0)

plt.show()
```

Output=>

Number of students in each class:

class

V   2

VI   4

Name: name, dtype: int64

Number of Students in Each Class