

## 練習題 1.1

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

df_filtered = df[df['PseudoID'] == 39]

unique_values = df_filtered['dp001_review_sn'].unique()

print(len(unique_values))
```

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## 練習題 1.2

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

df_filtered = df[(df['PseudoID'] == 39)]

drop_df = df_filtered['dp001_question_sn'].dropna()

unique_values = drop_df.unique()

print(len(unique_values))
```

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## 練習題 2.1

```
[ ] import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl (1).csv', encoding='big5', low_memory=False)

df_filtered = df[df['PseudoID'] == 281]

unique_values1 = df_filtered['dp001_video_item_sn'].unique()

unique_values2 = df_filtered['dp001_indicator'].unique()

print((unique_values1), (unique_values2))
```

[ 513. 10044. 1087.] ['111-3a-01' '111-3a-02' '5-n-10-S01']

## 練習題 2.2

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

df_filtered = df[(df['PseudoID'] == 281) & (df['dp001_prac_score_rate'] == 100)]

print(len(df_filtered))
```

346

## 練習題 3.1

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

df_filtered = df[(df['PseudoID'] == 71) & (df['dp001_record_plus_view_action'] == 'paused')]

num_rows = len(df_filtered)

print(num_rows)
```

578

## 練習題 3.2

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

df_filtered = df[df['PseudoID'] == 71]

unique_values = df_filtered['dp001_review_start_time'].unique()

ds = pd.Series(pd.to_datetime(unique_values))

dss = ds.dt.date

dssuni = dss.unique()

dsss = pd.Series(dssuni)

print(dsss)
```

0 2022-08-19  
1 2022-09-16  
2 2022-08-21  
dtype: object

## 練習題 4.1

```
from pandas.core.frame import DataFrame
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

review_sn = df['dp001_review_sn']

Review_sn_series = pd.Series(review_sn)

NumReview_sn = Review_sn_series.value_counts()

max_NumReview_sn = NumReview_sn.max()

print(NumReview_sn)
```

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## 練習題 4.2

```
[86] import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

ea = df[df['dp002_extensions_alignment'] == '["十二年國民基本教育類"]']

print(len(ea))
```

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## 練習題 4.3

```
import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

display = df['dp002_verb_display_zh_TW']

drop_display = display.dropna()

num_drop_display = drop_display.value_counts()

print(num_drop_display)
```

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## 練習題 4.4

```
[88] import pandas as pd

df = pd.read_csv('/content/edu_bigdata_impl.csv', encoding='big5', low_memory=False)

ea = df[df['dp002_extensions_alignment'] == '["校園職業安全"]']

print(len(ea))
```

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