

The screenshot shows a Google Colab interface with a dark theme. The left sidebar displays files: sample\_data, 100 Sales Records.csv, and student-dataset.csv. The main workspace has two code cells:

```
[2]: !pip install pandas
```

```
Requirement already satisfied: pandas in /usr/local/lib/python3.12/dist-packages (2.2.2)
Requirement already satisfied: numpy==1.26.0 in /usr/local/lib/python3.12/dist-packages (from pandas) (2.0.2)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.12/dist-packages (from pandas) (2
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.12/dist-packages (from pandas) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.12/dist-packages (from pandas) (2025.2)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.12/dist-packages (from python-dateutil>=2.8.2->
```

```
[4]: import pandas as pd
df = pd.read_csv("student-dataset.csv")
```

```
[5]: df.head()
```

```
... id name nationality city latitude longitude gender ethnic.group age english.grade math.grade scienc
0 0 Kiana Lor China Suzhou 31.31 120.62 F NaN 22 3.5 3.7
1 1 Joshua Lonaker United States of America Santa Clarita 34.39 -118.54 M NaN 22 2.9 3.2
2 2 Dakota Blanco United States of America Oakland 37.80 -122.27 F NaN 22 3.9 3.8
3 3 Natasha Yarussso United States of America Castro Valley 37.69 -122.09 F NaN 20 3.3 2.8
4 4 Brooke Cazares Brazil São José dos Campos -23.18 -45.88 F NaN 21 3.7 2.6
```

The screenshot shows a Google Colab interface with a dark theme. The left sidebar displays files: sample\_data, 100 Sales Records.csv, and student-dataset.csv. The main workspace has two code cells:

```
[6]: df.shape # rows & columns
df.columns # column names
df.info() # data types
df.describe() # statistics
```

```
[...]
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 307 entries, 0 to 306
Data columns (total 16 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   id               307 non-null    int64  
 1   name              307 non-null    object  
 2   nationality       307 non-null    object  
 3   city              307 non-null    object  
 4   latitude          307 non-null    float64
 5   longitude         307 non-null    float64
 6   gender             307 non-null    object  
 7   ethnic.group      0 non-null     float64
 8   age               307 non-null    int64  
 9   english.grade     307 non-null    float64
 10  math.grade        307 non-null    float64
 11  sciences.grade   307 non-null    float64
 12  language.grade   307 non-null    float64
 13  portfolio.rating 307 non-null    int64  
 14  coverletter.rating 307 non-null    float64
 15  refletter.rating 307 non-null    int64  
dtypes: float64(8), int64(4), object(4)
memory usage: 38.5+ KB
```

	id	latitude	longitude	ethnic.group	age	english.grade	math.grade	sciences.grade	language
count	307.000000	307.000000	307.000000		0.0	307.000000	307.000000	307.000000	307.000000
mean	153.000000	32.863388	-64.539121	NaN	21.964169	3.369707	3.414332	3.446580	4
std	88.767487	13.498582	81.249146	NaN	1.248013	0.538724	0.476839	0.509081	0

The screenshot shows a Google Colab interface with a dark theme. At the top, there are several tabs: 'Inbox (10) - shrihanreddy123...', 'Launch Your Career', 'Internship Task Submission', 'Instagram - Messages', 'Python-3.ipynb - Colab', and '100 Sales Records.csv'. Below the tabs, the title 'Python-3.ipynb' is visible along with a file menu: File, Edit, View, Insert, Runtime, Tools, Help. A search bar and a 'Share' button are also present.

The main area is a code editor with a sidebar labeled 'Files' containing files like 'sample\_data', '100 Sales Records.csv', and 'student-dataset.csv'. The code editor displays the following Python script:

```
df.isnull().sum() # count missing values
df = df.fillna(0) # fill missing values with 0

df['age'].mean()
df['age'].max()
df['age'].min()

df = pd.read_csv("100 Sales Records.csv")
total_sales = df['Units Sold'].sum()
best_product = df.groupby('Item Type')['Units Sold'].sum().idxmax()

print("Total Sales:", total_sales)
print("Best Selling Product:", best_product)

Total Sales: 512871
Best Selling Product: Cosmetics
```

The output section shows the results of the script execution:

Total Sales: 512871  
Best Selling Product: Cosmetics