

Task	Syntax	Description	Example
Load CSV data	<code>pd.read_csv('filename.csv')</code>	Read data from a CSV file into a Pandas DataFrame	<code>df_can=pd.read_csv('data.csv')</code>
Handling Missing Values	<code>df.dropna()</code>	Drop rows with missing values	<code>df_can.dropna()</code>
	<code>df.fillna(value)</code>	Fill missing values with a specified value	<code>df_can.fillna(0)</code>
Removing Duplicates	<code>df.drop_duplicates()</code>	Remove duplicate rows	<code>df_can.drop_duplicates()</code>
Renaming Columns	<code>df.rename(columns={'old_name': 'new_name'})</code>	Rename one or more columns	<code>df_can.rename(columns={'Age': 'Years'})</code>
Selecting Columns	<code>df['column_name']</code> or <code>df.column_name</code>	Select a single column	<code>df_can.Age</code> or <code>df_can['Age']</code>
	<code>df[['col1', 'col2']]</code>	Select multiple columns	<code>df_can[['Name', 'Age']]</code>
Filtering Rows	<code>df[df['column'] > value]</code>	Filter rows based on a condition	<code>df_can[df_can['Age'] > 30]</code>
Applying Functions to Columns	<code>df['column'].apply(function_name)</code>	Apply a function to transform values in a column	<code>df_can['Age'].apply(lambda x: x + 1)</code>
Creating New Columns	<code>df['new_column'] = expression</code>	Create a new column with values derived from existing ones	<code>df_can['Total'] = df_can['Quantity'] * df_can['Price']</code>
Grouping and Aggregating	<code>df.groupby('column').agg({'col1': 'sum', 'col2': 'mean'})</code>	Group rows by a column and apply aggregate functions	<code>df_can.groupby('Category').agg({'Total': 'mean'})</code>
Sorting Rows	<code>df.sort_values('column', ascending=True/False)</code>	Sort rows based on a column	<code>df_can.sort_values('Date', ascending=True)</code>
Displaying First n Rows	<code>df.head(n)</code>	Show the first n rows of the DataFrame	<code>df_can.head(3)</code>
Displaying Last n Rows	<code>df.tail(n)</code>	Show the last n rows of the DataFrame	<code>df_can.tail(3)</code>
Checking for Null Values	<code>df.isnull()</code>	Check for null values in the DataFrame	<code>df_can.isnull()</code>
Selecting Rows by Index	<code>df.iloc[index]</code>	Select rows based on integer index	<code>df_can.iloc[3]</code>
	<code>df.iloc[start:end]</code>	Select rows in a specified range	<code>df_can.iloc[2:5]</code>
Selecting Rows by Label	<code>df.loc[label]</code>	Select rows based on label/index name	<code>df_can.loc['Label']</code>
	<code>df.loc[start:end]</code>	Select rows in a specified label/index range	<code>df_can.loc['Age':'Quantity']</code>
Summary Statistics	<code>df.describe()</code>	Generates descriptive statistics for numerical columns	<code>df_can.describe()</code>