Pandas Methods

S.No	Function	Description
1	read_csv()	Reads a comma-separated values (CSV) file into a DataFrame.
2	columns	It is an inbuilt variable that returns column names from the DataFrame.
3	info()	Displays a summary of the DataFrame including data types, non-null counts, and memory usage.
4	head()	Returns the top N rows from the DataFrame. (Default N=5).
5	tail()	Returns the bottom N rows from the DataFrame. (Default N=5).
6	fillna()	Fills the missing values (None, NaN) with a specified value or method.
7	dropna()	Removes rows or columns with missing values. (axis=0 for rows, axis=1 for columns).
8	astype()	Converts the data type of one or more columns. (A dictionary can be passed as an argument).
9	drop()	Removes specific rows or columns from the DataFrame. (Use index/columns or axis=0/axis=1).
10	rename()	Changes the names of rows or columns. (Use index/columns or axis=0/axis=1).
11	replace()	Replaces one or more old values by new values. (A dictionary can be passed as an argument).
12	map()	Replaces all old values with new values. (If not matched, replaces with NaN/None. A dictionary can be used).
13	reset_index()	Resets the index to the default integer index starting from zero.
14	drop_duplicates()	Returns a DataFrame with duplicate rows removed.
15	describe()	Provides summary statistics for numeric columns.
16	duplicated()	Returns a Boolean Series indicating duplicate rows.
17	set_index()	Sets a specific column as the DataFrame index.
18	groupby()	Groups data based on column values and allows aggregation.
19	sort_index()	Sorts the DataFrame by its index.
20	sort_values()	Sorts the DataFrame by the values in one or more columns.
21	corr()	Computes pairwise correlation of numeric columns.
22	isnull()	Returns a Boolean DataFrame indicating missing values.
23	nunique()	Counts the number of unique values in a column.
24	unique()	Returns the unique values in a column.
25	value_counts()	Returns the count of each unique value in a column.

26	read_excel()	Reads an Excel file into a DataFrame.
27	read_json()	Reads a JSON file or string into a DataFrame.
28	Series()	Creates a one-dimensional labeled array.
29	DataFrame()	Creates a two-dimensional labeled data structure (table).
30	to_datetime()	Converts a column or value to datetime format.
31	cut()	Converts continuous data into bins(intervals).
32	merge()	Merges DataFrames using database-style join operations.
33	concat()	Concatenates pandas objects along a specified axis.
34	pivot()	Converts *long data* to *wide format* using unique values from one column to create new columns. (Rows become columns.)
35	melt()	Converts *wide data* to *long format* by unpivoting columns into rows. (Columns become rows).
36	pivot_table()	Creates a pivot table with aggregation
37	count()	Returns the number of non-missing values in each column or row.
38	max()	Returns the maximum value in each column or row.
39	min()	Returns the minimum value in each column or row.
40	sum()	Returns the sum of values for each column or row.
41	mean()	Returns the mean (average) of values in each column or row.
42	idxmax()	Returns the index of the first occurrence of the maximum value.
43	idxmin()	Returns the index of the first occurrence of the minimum value.
44	agg()	Applies one or more aggregation functions to a DataFrame or Series.
45	to_csv()	Converts the DataFrame to a CSV file.
46	to_excel()	Converts the DataFrame to an Excel file.
47	to_json()	Converts the DataFrame to a JSON file.

```
df . info()
df . head()
df . tail()
df .describe()
df . duplicated()
df . drop_duplicates()
df . astype()
df . fillna()
df . dropna()
df . drop()
df . replace()
df . rename()
df . set_index()
df . reset_index()
df . sort_index()
df . sort_values()
df.corr()
df.isnull()
```

```
Pd . read_csv()
Pd . read_excel()
Pd . read_json()
Pd . Series()
Pd . DataFrame ()
Pd . to_datetime()
Pd . cut()
Pd . merge()
Pd . concat()
Pd . pivot()
Pd . melt()
Pd . pivot_table()
```

```
count()
max()
min()
sum()
mean()
std()
var()
percentile()
idxmax()
idxmin()
agg()
```

```
shape
columns
index
values
loc [ ]
iloc [ ]
```

```
g = df . groupby()
g . get_group()
g . groups
```

```
Str . (built -in methods)
```

```
df . to_csv()
df . to_excel ()
df . to_json ()
```

```
df [col] . nunique()
df [col] . unique()
df [col] . value_counts ()
df [col]  . map()
```