Assignment 7- DataFrame

Q1. Create a DataFrame containing student information like Name, Age, Department, %Marks

1. Display column names of the DF
2. Show min/max and average marks
3. Get unique values and student count for each Department

Q2. Read csv file solar.csv

1. Display all the plants with capacity > 500 MW
2. Display plant details for New York plant
3. For all the plants display Average MW Per Plant and Generation (GWh)
4. Sort the plants by Generation (GWh) (ascending) and Installed Capacity (MW)(descending)
5. List top 5 plants for their Generation
6. Display all plant details for states – California, Nevada, Arizona and Texas
7. Group the plants by region, find – min/max capacity plant for each group
8. Add following information to the existing details for the plants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| North Carolina | 148 | 669 | 4.5 | 1162 | North |

Q.3Read csv gapminder2007.csv

1. Display data for all Asian countries
2. Display top and bottom 15 rows
3. Show all the rows where life expectancy is more than 50 years and less than 80 years
4. Show data for India, America and France
5. Show data for all countries where name starts with ‘A’
6. Show min/max and mean GDP and Population for each continent
7. Show population and life expectancy for all countries
8. Sort the data by country names (ascending) and GDP (descending)
9. Find top 20 most populous countries
10. Delete all rows for a specific country
11. Change all column names to title case
12. Change column names: pop to Population, gdpPercap to GDP\_Percap
13. Increase Life Expectancy by 2 years for all African countries
14. Find all the rows that contain NA values
15. Fill NA values with 0 for numeric columns