Pandas Part 1: Practical Questions

Question 1

Create a Series using a list of 5 fruit names. Assign custom index labels to each element.

Question 2

Create a DataFrame from the following dictionary:

```
{
  'Name': ['Alice', 'Bob', 'Charlie'],
  'Age': [25, 30, 35],
  'City': ['Pune', 'Mumbai', 'Nagpur']
}
```

Question 3

Create a DataFrame using NumPy to generate a 3x3 matrix of random integers between 1 and 100. Assign column names as 'A', 'B', 'C'.

Question 4

Using the DataFrame from Question 2, display: - First 2 rows - Last row - Shape of the DataFrame

Question 5

Use `.info()` and `.describe()` on the DataFrame created in Question 2.

Question 6

From the DataFrame in Question 2, select only the 'Name' and 'City' columns using `loc`.

Question 7

From the DataFrame in Question 2, use `iloc` to display the second row.

Question 8

Rename the 'Age' column to 'Years' in the DataFrame from Question 2.

Question 9

Drop the 'City' column from the DataFrame in Question 2.

Question 10

Modify the 'Years' column (previously 'Age') by adding 5 to each value.