



INDIAN SCHOOL AL WADI AL KABIR

Worksheet, 2022-23

| | | |
|-----------------------|--|---|
| Class: XII | SUB: INFORMATICS PRACTICES | Date of Completion: 24/04/2022 |
| Worksheet No:1 | TOPIC : Practical Questions- PYTHON | Note: To be written in the Record book |

1. Write a program to create three different series **S1**, **S2** and **S3**,
 - i) from a list of numbers [15,30,45,60,75,100] with default index.
 - ii) numpy array with arange() to generate numbers 10 to 15 as series elements and with index A, B, C, D, E
 - iii) using a dictionary with 5 subject names which you are studying as keys and marks as values.
2. Write a Program in Pandas to create series **StockSer1** using User-defined Dictionary that contains stock details like Item Name and Price of 5 different items. Item Name is the key and Price is the value.
3. Create a Series **AirticketSer** that stores the 5 Airfare as values and Airways as index. Write a program to display the Airfare of those airways which are priced less than OMR. 150.
4. Given a series **StudMark** that stores the marks of 10 students in a class. Write code to find out the biggest and the smallest 3 marks from the given series.
5. Create a Series **EmployeeSer** that stores the salary of 8 employees. Write a program to display the salary of those employees who are getting more than Rs. 5,000.
6. Create a series **DataSeries** with the scalar value 50 for the indices S1, S2, S3, S4 and S5. Also write the coding to remove the element from the index S3.
7. Create two series **S2** and **S3** with the following elements:

S2

| | |
|---|----|
| 1 | 25 |
| 2 | 15 |
| 3 | 10 |
| 4 | 30 |
| 5 | 12 |

S3

2 5
3 2
4 3
5 3
6 8

Perform the following operations:

- i) Perform the division operation S2 / S3
- ii) Perform the multiplication operation by using mul() method.
- iii) Use fill_value property to add two series with the default value 100.
- iv) To display all the elements of series more than 10.

8. Create the following series **COMPUTER** with the following elements and write the statements to perform the operations given below:

COMPUTER

| | |
|--------|-------|
| DELL | 51300 |
| HP | 54250 |
| APPLE | 93280 |
| LENOVO | 49375 |
| ACER | 47890 |

- i) Give a Name “Computer Devices” to the series COMPUTER.
- ii) Give a Name to the index as “BRAND”.
- iii) Display the no. elements of the series.
- iv) Display the data type of the given series.
- v) Display the dimension of the given series.

9. Create the following series **MobilePhone** with the following elements and write the statements to perform the operations given below:

MobilePhone

Mob1 Xiaomi Redmi Note 11 Pro
Mob2 Samsung Galaxy F23 5G
Mob3 Samsung Galaxy
Mob4 Realme Narzo 50A
Mob5 Nokia G10

- i) Display the values of the given indices Mob1 to Mob4 using slicing.
- ii) Display the values of the given indices Mob1, Mob3, Mob5 using slicing.
- iii) Display the values of the series in reverse order using slicing.

10. Create the following series **TV** with the elements and write the statements to perform the operations given below:

TV

| | |
|---------|---------|
| Ikon | 47.900 |
| Samsung | 138.390 |
| Sony | 145.200 |
| LG | 124.300 |
| PHILIPS | 98.375 |

- i) Display the values of Samsung, Sony and LG using loc method.
- ii) Display the values of Ikon and Samsung using iloc method.