



**GOVERNMENT COLLEGE  
KASARAGOD**



Micro-course in  
**DATA ANALYSIS**

**Session – 3**  
**Introduction to NumPy & Pandas**

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# PANDAS



- Open source library
- Built on top of NumPy
- Offers various data structures and operations

## Advantages of Pandas:

- Fast and efficient for manipulating and analyzing data
- Data from different file object can be loaded
- Easy handling of missing values
- Size mutability
- Data set merging and joining

- Importing library
- Types of data structures that Pandas package have:
  - 1) **Series**: One dimensional array holding data of any type.  
(like a column in a table)
  - 2) **Data frames**: Two dimensional data structure, like a two dimensional array, which can hold different data types.  
(like a table with rows and columns)

1. Creating a DataFrame using Dictionary
2. Extracting column
3. Locating row
4. Named indexes
5. Locating named indexes
6. Add a new column
7. Delete a column
8. **Size**: returns an int representing number of elements in the object
9. Exporting DataFrame
10. Loading files into DataFrame



```
print('Thank You')
```

**Thank You**