

Pandas

Its a one of the Python Library



Panal Data

The Data which is arranged in from of Tables

In Panal Data Contains Any Type of Data

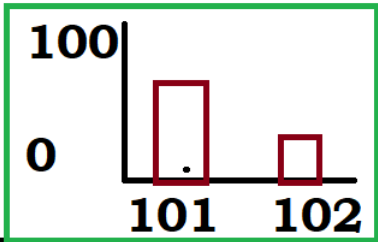
In Panal Data , Data is May Be NAN

Miss-Value

Not A None

Use of Pandas

The main purpose of pandas is to find the Relation between Two or More Columns in a Table for the purpose of Statistical Operations

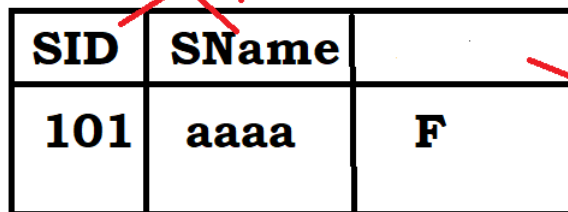


SID	S1	Res
101	40	P
102	20	F

>35 - Pass

Pandas Package

Its a Group of PanalDatas' which are Offers to Analyze
the Data - Labelled Data and Relational Data



SID	SName	
101	aaaa	F

Table Format

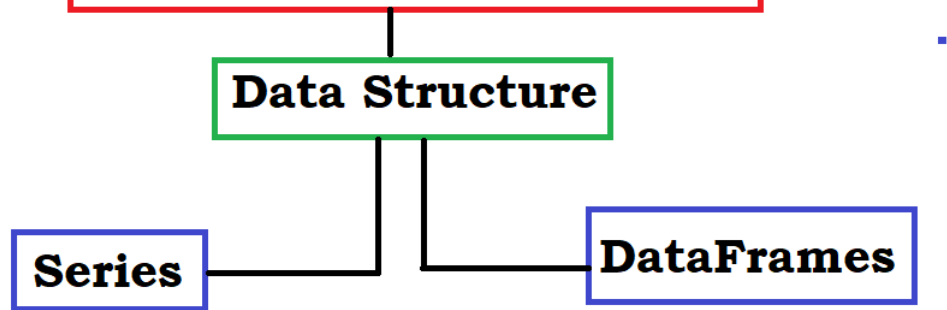
UnLabelled Data

Types of Pandas Packages

Data Structure

Series

DataFrames



Series

A Series is a **ONE-DIMENSIONAL LABELLED DATA DS**

0
1
2
3

a
b
c
d

The axies of Labelled Data is know as **indexes**

Series are Nothing But , Columns in Excel Sheet

Creating Series

Single Dim

Panda_Obj . Series(Collection-Name)

List
Tuple
Set
Arrays
NumPy

→

Rows

Change

↑

Y-Axis

0	CS
1	AB
2	IT
3	CZ
dtype: object	

↓

Columns

1 Dim , 0

```
import pandas as p
a=['CS','AB','IT','CZ']
b=p.Series(a)
print(b)
```


Accessing Panda Series Elements

```
graph TD; A[Accessing Panda Series Elements] --> B[Access with Position]; A --> C[Access with Index];
```

Access with Position

Access with Index

Access with Positions

```
0  CS    1  AB
1  AB    2  IT
2  IT
3  CZ
```

dtype: object

dtype: object

```
0  CS
```

```
3  CZ
```

dtype: object

```
import pandas as p
```

```
a=['CS','AB','IT','CZ']
```

```
b=p.Series(a)
```

```
print(b)
```

```
#Access with Position
```

```
print(b[1:3])
```

```
print(b[-4::3])
```

Access with Index

```
import pandas as p
a=['CS','AB','IT','CZ']
b=p.Series(a,index=['@',2,'#',4])
print(b['@'])#CS
print(b['#'])#IT
```