



INDIAN SCHOOL NIZWA

INFORMATICS PRACTICES

CH 1 Pandas Series- Worksheet 1

CLASS XII

- 1 The command to display last 3 rows from series named “week” is _____
i. `print(week.tail(3))` ii. `print(week.Tail(3))` iii. `print(week.Tails(3))` iv. `print(week.tails(3))`
- 2 To display the last 5 values of a dataframe df, you may write:
a) `df.head(5)` b) `df.Tail()` c) `df.tail()` d) `df.Head()`
- 3 Which of the following attribute is used to assigns a name to the index of the Series.
a) `name` b) `index` c) `index.name` d) All of the above
- 4 Ananya wants to store her Term-I mark in a Series which is already stored in a NumPy array. Choose the statement which will create the series with Subjects as indexes and Marks as elements.

```
import pandas as pd
import numpy as np
Marks = np.array([30,32,34,28,30])
subjects = ['English','Maths','Chemistry','Physics','IP']
Series1= _____
```


a) `pd.Series(Marks,index=subjects)` b) `pd.Series(np.Marks,index=subjects)`
c) `pd.Series(index=Marks, subjects)` d) `pd.Series(Marks,index)`
- 5 How many values will be there in array1, if given code is not returning any error?

```
>>> series4 = pd.Series(array1, index = ["Jan", "Feb", "Mar", "Apr"])
```


a) 1 b) 2 c) 3 d) 4
- 6 Consider the following two series objects S1 and S2

S1	A	20
	B	100

S2	0	200
	1	10

What will be the output of the following codes:
a. `print(S1+S2)`
b. `print(S1*2)`
- 7 Complete the given Python code to get the required output as: Rajasthan

```
import _____ as pd
di = {'Corbett': 'Uttarakhand', 'Sariska':
'Rajasthan', 'Kanha': 'Madhya Pradesh',
'Gir':'Gujarat'}
```


`NP = _____ . Series( _____ )`
`print(NP[ _____ ])`
- 8 Find the output of the following code:

```
import pandas as pd
lst1=[20,35,40]
ser1=pd.Series(lst1)
print(lst1+ lst1)
```

```
print(ser1+ser1)
```

- 9 Complete the given Python code to get the required output as "California":

```
import _____ as pd
data = {'Yosemite': 'California', 'Yellowstone': 'Wyoming', 'Glacier':
'Montana', 'Rocky Mountain': 'Colorado'}
national_parks = pd.Series(_____)
print(national_parks_____)
```

- 10 Predict the output of the given Python code:

```
import pandas as pd
list1=[-10,-20,-30]
ser = pd.Series(list1*2)
print(ser)
```

- 11 Monthly Car Sales of 12 months for a Company are given in the form of List:

```
L = [878, 1293, 7564, 9234, 1012, 3493, 9003, 10021, 3005, 999, 848, 3202]
```

Answer the following Questions:

(a) Write python code to create a Series CarSales using the above list and give names of months as index for the series.

(b) Write Python code to print the month and number of cars if the sale for the month is > 5000.

- 12 What will be the output of the following code:

```
>>> import pandas as pd
>>> mydata=pd.Series( ['rajesh', 'amit', 'tarun', 'Radhika'] )
>>> print(mydata < 'rajesh' )
```

- 13 Which of the following statement will install pandas library in python?

i. Pip install pandaspd ii. pip install pandas as pd iii. pip install pandas.pd iv. pip install pandas

- 14 Given two series S1 and S2

S1	
A	39
B	41
C	42
D	44

S2	
A	10
B	10
D	10
F	10

Find the output for following python pandas statements? a. S1[: 2]*100 b. S1 * S2

- 15 What will be the output of the following code: 2

```
import pandas as pd
list1=[2,4,6,8]
list2=['gh','mn','pq','st']
school=pd.Series(list1,index=list2)
print (school*2)
print (school[1:3])
```

- 16 What will be the output of the following code:

```
import pandas as pd
M=[15,-10,56,39,-90,15]
p=pd.Series(M)
```

```
print(p[0])  
print(p[[0,3,4]])
```

- 17 Write a program in to create a series 'Emp' using a dictionary having Employee name as key and salary as value with following data –

Employee Name	Salary
Ashok	10000
Ravi	7500
Dinesh	12500
Akram	8000

- 18 Consider the following series and write output for given statement:

```
S1  S2  
1 20  0 10  
2 30  1 30  
0 40  2 20  
a) S1 + S2  
b) S1 < S2
```

- 19 What will be the output of the following code:

```
import pandas as pd  
a=pd.Series([10,20,30,40])  
print(a>35)
```

- 20 Write the output.

```
import pandas as pd  
S=pd.Series([23,46,79,12],index=["Orange","red","purple","yellow"])  
print(S%2==0)  
print(S[S%2==0])
```