

SERIES – IMPORTANT CBSE QUESTIONS

Statement will install pandas library in python `pip install pandas as pd`

To create an empty Series object, you can use: `pd.Series( )`

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

```
Emp={'Ashok':10000, 'Ravi':7500, 'Dinesh':12500, 'Akram':8000}
```

```
S1=pd.Series(Emp)
```

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]) → 15
```

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

```
0    15
```

```
3    39
```

```
4   -90
```

To print last 3 records

```
print(head(3))
```

Write a program to create a series object using a dictionary that stores the number of Schools in each city of cities of your state.

```
D1={'AGRA':4, 'JHANSI':3, 'MATHURA':5, 'NOIDA':4}
```

```
school=mypandas.Series(D1)
```

Consider a given Series , M1. Write a program in Python Pandas to create the series.

	Marks
Term1	67
Term2	56
Term3	77
Term4	89

```
import pandas as pd
```

```
M1=pd.Series([45,65,24,89],index=['term1','term2','term3','term4'])
```

Given two series S1 and S2

	S1		S2
A	39	A	10
B	41	B	10
C	42	D	10
D	44	F	10

Find the output for following python pandas statements?

a. `S1[:2]*100` **a. A 3900 B 4100**

b. `S1 * S2`

A 390

B 410

C NaN

D 440

F NaN

What will be the output of the following code:

```
>>> import pandas as pd
```

```
>>> mydata=pd.Series( ['rajesh', 'amit', 'tarun', 'Radhika'] )
```

```
>>> print(mydata < 'rajesh' )
```

0 False

1 True

2 False

3 True

Write a program to create a series object using a dictionary that stores the number of students in each stream of class XII.

Note: Assume three streams as 'science', 'arts', 'commerce' with 27, 38, 42 students respectively.

```
St={'Science':27, 'arts':38, 'commerce':42}
```

```
S1=pd.Series(St)
```

Consider the commands below:

```
import pandas as pd
```

```
lst=[10,20]
```

```
ds=pd.Series([10,20])
```

Here lst is a list and ds is a series. Both have same values 10 and 20. What will be the output of the following commands? Justify your answer.

a. `print ( lst * 2 )`

b. `print ( ds * 2 )`

a. [10,20,10,20] – Replication

b. [20,40] – Multiplication

What will be the output of the following code:

```
import pandas as pd
```

```
list1=[2,4,6,8]
```

```
list2=['gh','mn','pq','st']
```

```
school=pd.Series(list1,index=list2)
```

```
print (school*2)
```

```
gh 4
```

```
mn 8
```

```
pq 12
```

```
st 16
```

```
dtype: int64
```

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

```
mn 4
```

```
pq 6
```

```
dtype: int64
```

Write a program to create a series object using dictionary, having 3 movie names as data with index labels 2000,2010 and 2020.

```
import pandas as pd
```

```
s = pd.Series([ '1983','salute','kurup'],index=[2000 , 2010 ,2020])
```

```
print(s)
```

```
print(s.index)
```

```
2000    1983
2010    salute
2020    kurup
dtype: object
```

```
Index([2000, 2010, 2020], dtype='int64')
```

```
import pandas as pd
```

```
s = pd.Series(6,index=range(0,5))
```

```
print(s)
```

```
print(s.empty)
```

```
0    6
```

```
1    6
```

```
2    6
```

```
3    6
```

```
4    6
```

```
dtype: int64
```

```
False
```