



INDIAN SCHOOL AL WADI AL KABIR
Worksheet, 2023-24

Class: XII	SUB: INFORMATICS PRACTICES	Date of Completion:
Worksheet -II	TOPIC: Data Handling-Series	30-04-2023

Q.I Guess The output

```
import pandas as xyz
s1=xyz.Series([10,20,30,40,50],index=['a','b','c','d','e'])
print(s1['c'])
print(s1[0])
print(s1[:])
print(s1[1:4])
print(s1[::-1])
print(s1['b':'d'])
print(s1[[1,3]])
print(s1[['a','c','e']])
print(s1>20)
print(s1[s1>20])
print(s1+10)
print(s1**2)
print(s1*2)
```

Q.II Guess the output

```
import pandas as xyz
import numpy as np
i=[2,4,6,8,10]
```

```
d1=np.array([5,10,15,20,25])
ser1=xyz.Series(d1,index=i)
print(ser1)
ser2=xyz.Series(index=np.arange(1,6,1),data=d1)
print(ser2)
```

Q.III Find out the output produced

```
import pandas as pd
import numpy as np
q=[3,6,9,12,15]
i=[4,8,12,np.nan,20]
myser=pd.Series(data=q,index=i)
print(myser)
myser[24.0]=18
print(myser)
myser[NaN]=13    #NameError: name 'NaN' is not defined
myser[4.0]=4
print(myser)
myser['NaN']=13
print(myser)
myser[3]=14
print(myser)
myser[1:4]=50
print(myser)
myser[:]=0
print(myser)
```

Q.IV What is the output of the following code?

```
import pandas as pd
```

```

import numpy as np
d1={'os':200,'python':350.0,'sql':250,'office':375,'AI':400}
ser1=pd.Series(d1)
print(ser1)
print(ser1.index)
print(ser1.values)
ser1.index=['b1','b2','b3','b4','b5']
print(ser1)
ser1[:]=[10,20,30,40,50]
print(ser1)
ser1.values=[10,20,30,40,50] #AttributeError: can't set attribute 'values'

```

Q.V Guess the output

```

import pandas as pd
import numpy as np
s1=pd.Series(data=[1,2,3,4,5],index=['a','b','c','d','e'])
s2=pd.Series(index=['y','z','e','d','a'],data=[4,5,6,7,8],)
print(s1)
print(s2)
print(s1+s2)
print(s1.add(s2,fill_value=0))
print(s1-s2)
print(s1.sub(s2,fill_value=10))
print(s1*s2)
print(s1.mul(s2,fill_value=2))
print(s2/s1)
print(s2.div(s1,fill_value=1))
print(s2%s1)

```

```
print(s2.mod(s1,fill_value=10))
```

Q.VI What is the output?

```
import pandas as pd
```

```
s1=pd.Series([0,0,0])
```

```
print(s1)
```

```
s2=pd.Series(data=2*(3,30))
```

```
print(s2)
```

```
s3=pd.Series(data=[2,4,5]*2)
```

```
print(s3)
```

```
s4=pd.Series(s3*2)
```

```
print(s4)
```

```
s4.drop(2)
```

```
print(s4)
```

```
del s4[1]
```

```
print(s4)
```

```
s4.drop([2,4])
```

```
print(s4)
```

```
print(s3.sort_values(ascending=False))
```

```
s3.name="my series"
```

```
print(s3)
```

```
s3.index.name="column1"
```

```
print(s3)
```

```
print(s3.values)
```

```
print(s3.size)
```

```
print(s3.shape)
```

```
print(s3.empty)
```

```
print(s3.tail(2))
print(s3.head(2))
print(s3.head())
print(s3.tail())
print(s3.count())
s4=s1+s2
print(s4.size)
print(s4.count())
print(s4.ndim)
```