
1) split the string:

```
s= "Hi there san!"  
print(s.split())  
['Hi', 'there', 'san!']
```

#use .format() to print the following string

```
planet = "Earth"  
diameter= 12742  
print("The diameter of {planet} is {diameter} kilometers".format(planet = "Earth",diameter= 1274))  
The diameter of Earth is 1274 kilometers
```

```
#numpy  
# 4.1) create an array of 10 zeros:  
import numpy as np  
array=np.zeros(10)  
print(array)
```

```
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

```
#3  
d= {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}  
print(d['k1'][3]['tricky'][3]['target'][3])
```

```
hello
```

```
#4.2) create an array of 10 fives  
import numpy as np  
array=np.ones(10)*5  
print(array)
```

```
[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

```
#5)Array of all even integers from 20 to 35  
import numpy as np  
array=np.arange(20,35,2)  
print(array)
```

```
[20 22 24 26 28 30 32 34]
```

```
#6) create a 3x3 matrix values range from 0 to 8  
import numpy as np  
b=np.arange(0,9).reshape(3,3)  
print(b)
```

```
[[0 1 2] [3 4 5] [6 7 8]]
```

```
# 7)concatinate a and b  
a= np.array([1,2,3])  
b= np.array([4,5,6])  
c= np.concatenate((a,b),axis= None)  
print(c)
```

```
[1 2 3 4 5 6]
```

```
# pandas:  
#8) create a data frame using 3rows and 3columns:  
import pandas as pd  
data=[1,2],[4,5],[7,8]  
df=pd.DataFrame(data, columns=['a','b'])  
df
```



#9 Generate the series of dates from 1st jan,2023 to 10 feb,2023:

```
import pandas as pd  
df = pd.date_range(start='1/1/2023',end='10/2/2023')  
df
```

```
DatetimeIndex(['2023-01-01', '2023-01-02', '2023-01-03', '2023-01-04',
```

```
'2023-01-05', '2023-01-06', '2023-01-07', '2023-01-08', '2023-01-09', '2023-01-10'])
```

```
#10) create 2D list to data frame  
import pandas as pd  
list = [[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]  
df = pd.DataFrame(list,columns =("no","string","int"))  
df
```

