**import** pandas **as** pd  
import numpy **as** np   
import seaborn **as** sns

split this string

In [2]:

s**=**"Hi there Sam!"  
x **=** s**.**split()  
  
print(x)

['Hi', 'there', 'Sam!']

use.format() to print the following string

output should be: The deameter of Earth is 12742 kms.

In [3]:

planet**=**"Earth"  
diameter **=** 12742  
print( 'The diameter of {} is {} kilometers.' **.**format(planet,diameter));

The diameter of Earth is 12742 kilometers.

IN this nest dicftionary grab the word"hello"

In [ ]:

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

hello

create ab array of 10 zeros?

In [4]:

array**=**np**.**zeros(10)  
print("An array of 10 zeros:")  
print(array)

An array of 10 zeros:  
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]

create ab array of 10 fives?

In [5]:

array**=**np**.**ones(10)**\***5  
print("An array of 10 fives:")  
print(array)

An array of 10 fives:  
[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]

create an array of all the even integers from 20 to 35

In [6]:

**import** numpy **as** np  
array**=**np**.**arange(20,35,2)  
print("Array of all the even integers from 20 to 35")  
print(array)

Array of all the even integers from 20 to 35  
[20 22 24 26 28 30 32 34]

create a 3\*3 matrix with values ranging from 0 to 8

In [7]:

x **=** np**.**arange(0, 9)**.**reshape(3,3)  
print(x)

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

concatinate a and b

In [8]:

a**=**np**.**array([1,2,3])  
b**=** np**.**array([4,5,6])  
c **=** np**.**concatenate((a,b))  
print(c)

[1 2 3 4 5 6]

create a data frame with 3 rows and 2 columns

In [9]:

data **=** [['sindhu', 21], ['yazhini', 20], ['vishal', 22]]  
df **=** pd**.**DataFrame(data, columns**=**['Name', 'Age'])  
df

Out[9]:

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Age** |
| **0** | sindhu | 21 |
| **1** | yazhini | 20 |
| **2** | vishal | 22 |

generate the series of dates from 1st jan, 2023 to 10th feb, 2023

In [10]:

**import** datetime  
pd**.**date\_range(start**=**"2023-01-01",end**=**"2023-02-10")**.**to\_pydatetime()**.**tolist()

Out[10]:

[datetime.datetime(2023, 1, 1, 0, 0),  
 datetime.datetime(2023, 1, 2, 0, 0),  
 datetime.datetime(2023, 1, 3, 0, 0),  
 datetime.datetime(2023, 1, 4, 0, 0),  
 datetime.datetime(2023, 1, 5, 0, 0),  
 datetime.datetime(2023, 1, 6, 0, 0),  
 datetime.datetime(2023, 1, 7, 0, 0),  
 datetime.datetime(2023, 1, 8, 0, 0),  
 datetime.datetime(2023, 1, 9, 0, 0),  
 datetime.datetime(2023, 1, 10, 0, 0),  
 datetime.datetime(2023, 1, 11, 0, 0),  
 datetime.datetime(2023, 1, 12, 0, 0),  
 datetime.datetime(2023, 1, 13, 0, 0),  
 datetime.datetime(2023, 1, 14, 0, 0),  
 datetime.datetime(2023, 1, 15, 0, 0),  
 datetime.datetime(2023, 1, 16, 0, 0),  
 datetime.datetime(2023, 1, 17, 0, 0),  
 datetime.datetime(2023, 1, 18, 0, 0),  
 datetime.datetime(2023, 1, 19, 0, 0),  
 datetime.datetime(2023, 1, 20, 0, 0),  
 datetime.datetime(2023, 1, 21, 0, 0),  
 datetime.datetime(2023, 1, 22, 0, 0),  
 datetime.datetime(2023, 1, 23, 0, 0),  
 datetime.datetime(2023, 1, 24, 0, 0),  
 datetime.datetime(2023, 1, 25, 0, 0),  
 datetime.datetime(2023, 1, 26, 0, 0),  
 datetime.datetime(2023, 1, 27, 0, 0),  
 datetime.datetime(2023, 1, 28, 0, 0),  
 datetime.datetime(2023, 1, 29, 0, 0),  
 datetime.datetime(2023, 1, 30, 0, 0),  
 datetime.datetime(2023, 1, 31, 0, 0),  
 datetime.datetime(2023, 2, 1, 0, 0),  
 datetime.datetime(2023, 2, 2, 0, 0),  
 datetime.datetime(2023, 2, 3, 0, 0),  
 datetime.datetime(2023, 2, 4, 0, 0),  
 datetime.datetime(2023, 2, 5, 0, 0),  
 datetime.datetime(2023, 2, 6, 0, 0),  
 datetime.datetime(2023, 2, 7, 0, 0),  
 datetime.datetime(2023, 2, 8, 0, 0),  
 datetime.datetime(2023, 2, 9, 0, 0),  
 datetime.datetime(2023, 2, 10, 0, 0)]

create 2D list to dataframe

In [11]:

lists**=**[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]  
df **=** pd**.**DataFrame(lists, columns **=**['Id', 'Name','Age'])   
print(df )

Id Name Age  
0 1 aaa 22  
1 2 bbb 25  
2 3 ccc 24