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In [52]: # 1 split this stri
```

```
In [2]: #1 split this string
```

```
s="hi there sam!"
h=s.split()
print(h);

['hi', 'there', 'sam!']
```

```
In [ ]: # 2 use. format() to print the following string
```

```
In [40]: #the diameter of earth is 1274 2 kilometers
```

```
In [41]: planet="earth"
diameter=12742
print('the diameter of {} is {} killometers.'.format(planet, diameter));

the diameter of earth is 12742 killometers.
```

```
In [11]: #3 in this nested dictionary grab the word "hello".
```

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

hello
```

```
In [84]: #4a)array of 10 zeros
```

```
import numpy as np
array=np.zeros(10)*2
print("an array of 10 zero")
print(array)

an array of 10 zero
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

```
In [87]: #4b) array(10)*5
```

```
import numpy as np
array=np.ones(10)*5
print("an array of 10 five")
print(array)

an array of 10 five
[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

```
In [59]: #5)array of all the even integer from 20 to 35")
```

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

array of all the even integers from 20 to 35
[20 21 22 23 24 25 26 27 28 29 30 31 32 33 34]
```

```
In [70]: #6)3x3 matrix
```

```
import numpy as np
array_2D=np.identity(3)
print('3*3 matrix:')
print(array_2D)
```

```
3*3 matrix:  
[[1. 0. 0.]  
 [0. 1. 0.]  
 [0. 0. 1.]]
```

```
In [38]: #7)concatenation  
import numpy as np  
a=np.array([1,2,3])  
b=np.array ([4,5,6])  
c=a+b,a*b,a-b  
print(c)  
  
(array([5, 7, 9]), array([ 4, 10, 18]), array([-3, -3, -3]))
```

```
In [28]: #8 Creating Dataframe from Lists  
  
# Import pandas library  
import pandas as pd  
  
# initialize list elements  
data = [10,20,30,40,50,60]  
  
# Create the pandas DataFrame with column name is provided explicitly  
df = pd.DataFrame(data, columns=['Numbers'])  
  
# print dataframe.  
df
```

```
Out[28]:
```

	Numbers
0	10
1	20
2	30
3	40
4	50
5	60

```
In [74]: #9 generate the series of dates from 1st 2023,1,1. to 2023-10-2  
import timedelta,data  
def daterange(date1,date2);  
for n if in_rang(int((date2-date).days)+1):  
    yield date1+timedelta(n)  
start_dt=date(2023-1-1)  
end_dt=date(2023-10-2)  
for dt in daterange(start_dt,end_dt);  
print9dt.strftime("yy-%m-%d")
```

```
File <tokenize>:6  
    start_dt=date(2023-1-1)  
    ^  
IndentationError: unindent does not match any outer indentation level
```

```
In [ ]:
```

```
In [19]: #10)create 2d list to data frame  
import pandas as pd  
  
# List1  
lst=[[1, 'aaa', 22],[2, 'bbb', 25],[3, 'ccc', 24]]
```

```
# creating df object with columns specified
df=pd.DataFrame(lst, columns =['FName', 'LName', 'Age'], dtype =float )
print(df)
```

```
   FName LName   Age
0    1.0   aaa  22.0
1    2.0   bbb  25.0
2    3.0   ccc  24.0
```

```
C:\Users\GANESH\AppData\Local\Temp\ipykernel_6748\3116688088.py:8: FutureWarning: Could
not cast to float64, falling back to object. This behavior is deprecated. In a future ve
rsion, when a dtype is passed to 'DataFrame', either all columns will be cast to that dt
ype, or a TypeError will be raised.
```

```
df=pd.DataFrame(lst, columns =['FName', 'LName', 'Age'], dtype =float )
```

In [ ]: