## → Basic Python

■ 1. Split this string

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

Output should be: The diameter of Earth is 12742 kilometers.

```
planet = "Earth"
diameter = 12742

print("The diameter of {a} is {b} kilometer".format(a= planet,b=diameter))
    The diameter of Earth is 12742 kilometer
```

3. In this nest dictionary grab the word "hello"

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

## Numpy

```
import numpy as np
```

Create an array of 10 zeros?

Create an array of 10 fives?

```
np.zeros(10)
    array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])

np.ones(10)*5
    array([5., 5., 5., 5., 5., 5., 5., 5., 5.])
```

▼ 5. Create an array of all the even integers from 20 to 35

```
values=[]
for i in range(20,35):
    if i%2==0:
       values.append(i)
np.array(values)
    array([20, 22, 24, 26, 28, 30, 32, 34])
```

→ 6. Create a 3x3 matrix with values ranging from 0 to 8

7. Concatenate a and b

$$a = np.array([1, 2, 3]), b = np.array([4, 5, 6])$$

## **Pandas**

8. Create a dataframe with 3 rows and 2 columns

```
import pandas as pd
```

9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023

## 10. Create 2D list to DataFrame

▼ lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]

lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]

Colab paid products - Cancel contracts here

• ×