

## Basic Python

### 1. Split this string

```
s = "Hi there Sam!"
```

### 2. Use .format() to print the following string.

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

```
planet = "Earth"  
diameter = 12742
```

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

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

## Numpy

```
import numpy as np
```

### 4.1 Create an array of 10 zeros?

### 4.2 Create an array of 10 fives?

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

### 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]]
```