ashmi-assignment

```
#!/usr/bin/env python
# coding: utf-8

# # Basic Python

# ## 1. Split this string

# In[1]:


s = "Hi there Sam!"


# In[2]:


s.split()


# ## 2. Use .format() to print the following string.
#
# ### Output should be: The diameter of Earth is 12742 kilometers.

# In[3]:


planet = "Earth"
diameter = 12742


# In[4]:


print("The diameter of {} is {} kilometers.".format(planet,diameter))


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

In[6]:

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

In[7]:

```
d['k1'][3]['tricky'][3]['target'][3]
```

Numpy

In[8]:

```
import numpy as np
```

4.1 Create an array of 10 zeros?
#
> Indented block
#
#
4.2 Create an array of 10 fives?

In[10]:

```
array_zeros=np.zeros(10)
print(array_zeros)
```

In[12]:

```
array_fives=np.ones(10)*5
print(array_fives)
```

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

In[13]:

```
array=np.arange(20,35,2)
print(array)
```

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

In[14]:

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

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

In[15]:

```
a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
np.concatenate((a, b), axis=0)
```

Pandas

8. Create a dataframe with 3 rows and 2 columns

In[16]:

```
import pandas as pd
```

In[18]:

```
data = {'Name': ['AR','Arsh','Aira'],
```

```
'Age': [21, 25, 23]}

df = pd.DataFrame(data)
print(df)


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

# In[19]:


per1 = pd.date_range(start ='1-1-2023',
end ='10-02-2023')

for val in per1:
print(val)


# ## 10. Create 2D list to DataFrame
#
# lists = [[1, 'aaa', 22],
#          [2, 'bbb', 25],
#          [3, 'ccc', 24]]

# In[23]:


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


# In[ ]:
```