Assignment1_loganayaki

Initializing

```
[ ] # 1)split this string:
    s="Hi there San!"
    print(s.split())
```

```
['Hi', 'there', 'San!']
```

```
[ ] # 2)use .format() to print the foll
    planet="Earth"
    diameter=12742
    print("The diameter of {planet} is
```

```
The diameter of Earth is 12742 k
```

```
[ ] # 3)
    d={'k1':[1,2,3,{'tricky':['oh','mar
    print(d['k1'][3]['tricky'][3]['tar
```

```
hello
```

```
[ ] # Numpy
    # 4.1) Create an array of 10 zeros:
    import numpy as np
    array=np.zeros(10)
    print(array)
```

```
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

```
[ ] # 9)Generate the series of dares fr
    import pandas as pd
    df=pd.date_range(start='1/1/2023',e
    df
```

```
DatetimeIndex(['2023-01-01',
'2023-01-02', '2023-01-03',
'2023-01-04',
                '2023-01-05',
'2023-01-06', '2023-01-07',
'2023-01-08',
                '2023-01-09',
'2023-01-10',
                ...
                '2023-09-23',
'2023-09-24', '2023-09-25',
'2023-09-26',
                '2023-09-27',
'2023-09-28', '2023-09-29',
'2023-09-30',
                '2023-10-01',
'2023-10-02'],

dtype='datetime64[ns]',
length=275, freq='D')
```

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RAM
Disk

```
# pandas
# 8)create a dataframe using 3rows
import pandas as pd
data=[1,2],[4,5],[7,8]
df=pd.DataFrame(data, columns=['a',
df
```

	a	b
0	1	2
1	4	5
2	7	8

[15]
```
# 10) create 2D list to DataFrame:
import pandas as pd
list=[[1,'aaa',22],[2,'bbb',25],[3,
df=pd.DataFrame(list,columns=("no",
df
```

	no	string	int
0	1	aaa	22
1	2	bbb	25
2	3	ccc	24

Assignment1_loganayaki

Connecting

```
[ ] # 6) create a 3×3 matrix values rar
    import numpy as np
    b=np.arange(0,9).reshape(3,3)
    print(b)
```

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

```
[ ] # 7)concatenate a and b:
    a=np.array([1,2,3])
    b=np.array([4,5,6])
    c=np.concatenate((a,b),axis=None)
    print(c)
```

```
 [1 2 3 4 5 6]
```

```
[ ] # pandas
    # 8)create a dataframe using 3rows
    import pandas as pd
    data=[1,2],[4,5],[7,8]
    df=pd.DataFrame(data, columns=['a',
    df
```

	a	b
0	1	2

[7] 0s
```
# Numpy
# 4.1) Create an array of 10 zeros:
import numpy as np
array=np.zeros(10)
print(array)
```

```
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

[8] 0s
```
# 4.2) Create an array of 10 fives:
import numpy as np
array=np.ones(10)*5
print(array)
```

```
[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

[9] 0s
```
# 5) Array of all even integers fr
import numpy as np
array=np.arange(20,35,2)
print(array)
```

```
[20 22 24 26 28 30 32 34]
```

[10] 0s
```
# 6) create a 3×3 matrix values ra
import numpy as np
b=np.arange(0,9).reshape(3,3)
print(b)
```