

C27 - Inclass Assignment (11)

author & date

- author: Akshar Patel
- date: 4/20/2022

Q1. Update author name and date.

Creating an array

```
In [50]: # Run this line first  
import numpy as np
```

Q2. Create the one dimensional Numpy array `rating` that stores four items [4.5, 3.2, 4.9, 2.4].

```
In [51]: rating = np.array([4.5, 3.2, 4.9, 2.4])
```

Q3. Create the two dimensional Numpy array `rating_price` that stores two lists - [4.5, 3.2, 4.9, 2.4] and [900, 800, 700, 600].

```
In [52]: rating_Price = np.array([[4.5, 3.2, 4.9, 2.4],[900, 800, 700, 600]])
```

Dimension and size check

Q4. A line of code to check the number of dimension of `rating`

```
In [53]: rating.ndim
```

```
Out[53]: 1
```

Q5. A line of code to check the number of items in `rating_price`

```
In [54]: rating_Price.size
```

```
Out[54]: 8
```

Easy creation

Q6. A line of code to create a Numpy matrix (2D array) of all 0s that is 3x5

```
In [55]: np.zeros((3,5))
```

```
Out[55]: array([[0., 0., 0., 0., 0.],
               [0., 0., 0., 0., 0.],
               [0., 0., 0., 0., 0.]])
```

Q7. A line of code to create an one dimension Numpy array with elements ranging from 10 to 100 as per the interval 3

```
In [56]: np.arange(10, 100, 3)
```

```
Out[56]: array([10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58,
               61, 64, 67, 70, 73, 76, 79, 82, 85, 88, 91, 94, 97])
```

Sorting

```
In [57]: # Run this line first to create a variable `score`

score = np.array([9.3, 7.2, 3.8, 1.2, 8.5, 4.3, 5.9, 2.0])
```

Q8. A line of code to create a new variable sorted_score that contains a result of sorting score variable in ascending order

```
In [58]: sorted_score = np.sort(score)
```

Indexing

Q9. A line of code to select the first four items in sorted_score . The output should be a list of [1.2, 2. , 3.8, 4.3].

```
In [59]: sorted_score[0: 4]
```

```
Out[59]: array([1.2, 2. , 3.8, 4.3])
```

```
In [60]: # Run this line first for Q10

rankings = np.array([[1, 2, 3, 4], [5, 6, 7, 8], [9, 10, 11, 12]])
```

Q10. A line of code to select the value 4 only from rankings variable. The output should be 4 .

In [62]: `rankings[0][3]`

Out[62]: 4

In []: