quizz_numpy

September 14, 2021

Get to Know a Numpy Array

You will use the numpy array A for the following questions.

[3]:
```
import numpy as np
x=np.array([[11,12],[21,22],[31,32]])
x
```

[3]:
```
array([[11, 12],
       [21, 22],
       [31, 32]])
```

1. Find the type of `x` using the function `type()`.

[4]:
```
type(x)
```

[4]:
```
numpy.ndarray
```

Click here for the solution

```
type(A)
```

2. Find the shape of the array:

[6]:
```
x.shape
```

[6]:
```
(3, 2)
```

Click here for the solution

```
A.shape
```

3. Find the type of data in the array:

[7]:
```
x.dtype
```

[7]:
```
dtype('int64')
```

Click here for the solution

```
A.dtype
```

4. Find the second row of the numpy array A:

[8]:
```
x[2]
```

[8]:
```
array([31, 32])
```

Click here for the solution

```
A[1]
```

Two Types of Multiplication

You will use the following numpy arrays for the next questions:

[9]:
```
A=np.array([[11,12],[21,22]])
B=np.array([[1, 0],[0,1]])
```

1. Multiply array A and B.

[10]:
```
A*B
```

[10]:
```
array([[11,  0],
       [ 0, 22]])
```

Click here for the solution

```
C = A * B
C
```

2. Perform matrix multiplication on array A and B (order will not matter in this case).

[11]:
```
np.dot(A,B)
```

[11]:
```
array([[11, 12],
       [21, 22]])
```

Click here for the solution

```
Z = np.dot(A,B)
Z
```