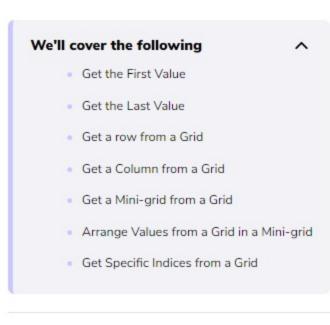


### **Indexing in NumPy**

This lesson will help you learn indexing in NumPy.

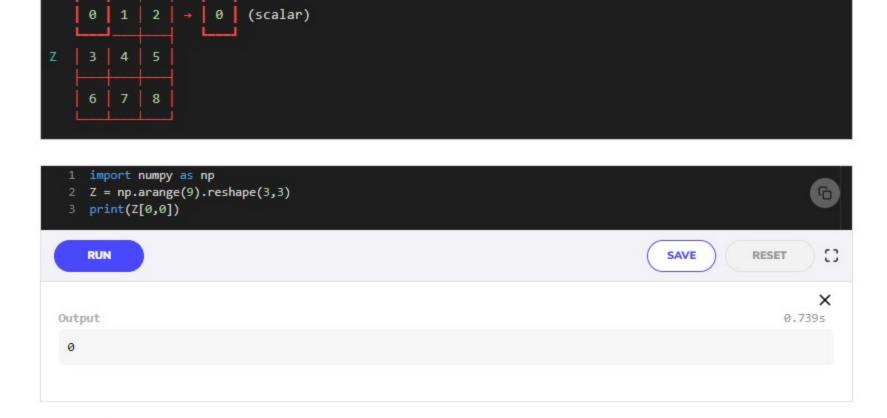


To access value at a specific index write: Z=np.arrange(9)

Indexing means to refer to any value in an array. Each item in a numpy array is stored at a specific index.

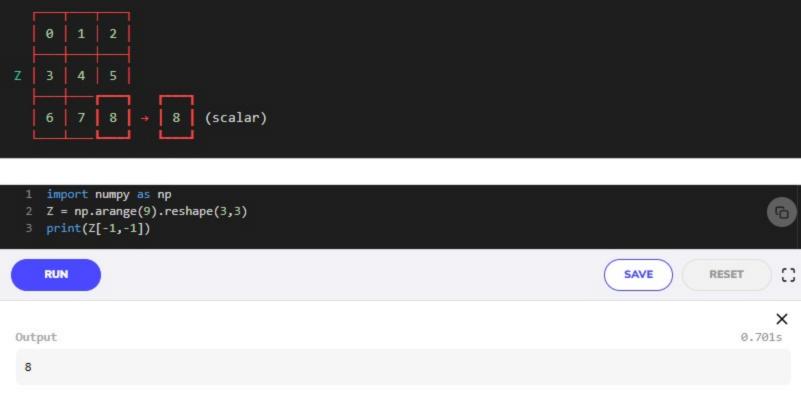
Z[0] #get the value at index 0 **Get the First Value** 

### To get the first value of a matrix, write: Z(0,0).



#### To get the last value of a matrix, write: Z[-1,-1].

**Get the Last Value** 



#### To get a row from a grid, write: Z[row\_index].

Get a row from a Grid

To get the first row from a grid, write: Z[1].



#### To get the column from a grid, use Z[:,column\_index]

Get a Column from a Grid

To get the second column from a grid, use Z[:,2]

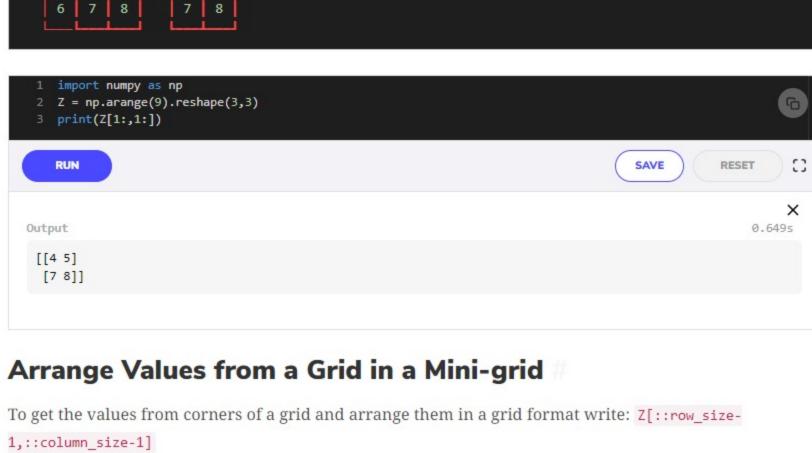
(view)



## To get a subset of a grid, write: Z[row\_index:,column\_index:]

To get a subset of a grid containing the first row onwards up to the size and first column onwards up to the size, write: Z[1:,1:].

(view)

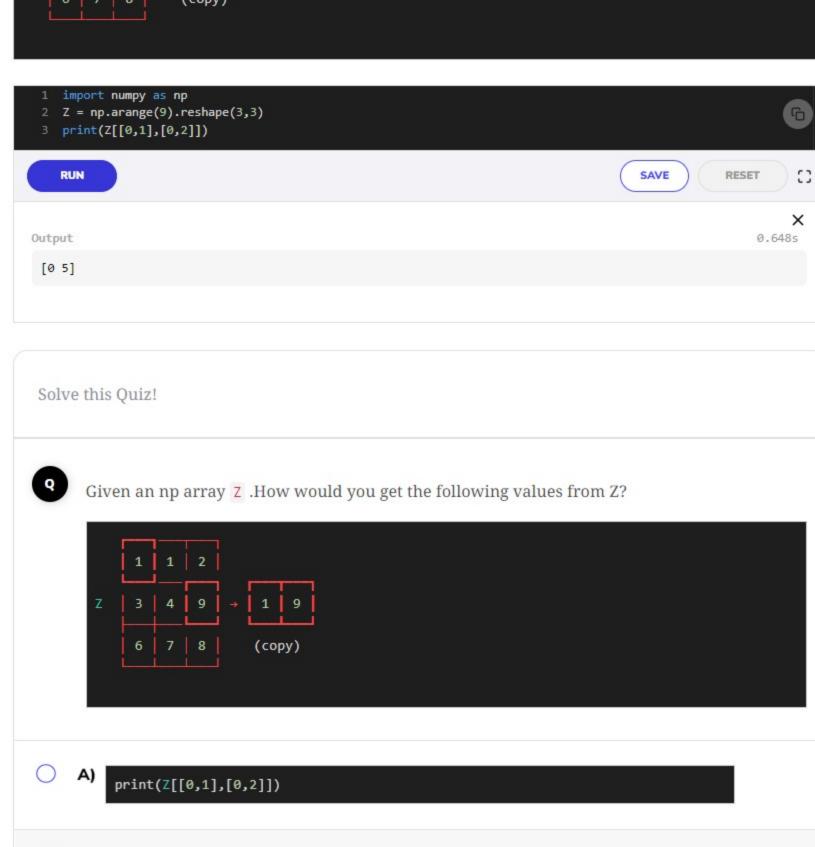


## To get the values at index (0,0),(0,2),(2,0),(2,2) and arrange them in a grid format write: (Z[::2,::2])



# 0 1 2

(copy)



B) print(Z[[0,1],[0,1]]) COMPLETED 0%

Now that you have learned about indexing in NumPy, let's move on to the next lesson "Broadcasting in

NumPy".

 $\otimes$ 

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