Exercises: NumPy

WE'LL COVER THE FOLLOWING

Time To Test Your Skills!

Q1.Create a null vector (all zeros) of size 10 and set it in the variable called “Z”.

```
# Your solution goes here (Z = ....)
```

Q2. Create a 1D array of numbers from 0 to 9 and set it in the variable called “arr”.

```
# Your solution goes here
```

Q3. Create a 3x3x3 array with random values and set it in the variable called “arr”.

```
# Your solution goes here
```

Q4. Create a 10x10 array with random values called “arr4”. Find its minimum and maximum values and set them in the variables called “min_val” and “max_val” respectively.

```
# Your solution goes here
```

Q5. First create a 1D array with numbers from 1 to 9 and then convert it into a 3x3 grid. Store the final answer in the variable called “grid”.

```
# Your solution goes here
```

Q6. Replace the maximum value in the given vector, “arr6”, with -1.

```
# Input
arr6 = np.arange(10)

# Your solution goes here
```

Q7. Reverse the rows of the given 2D array, “arr7”.

```
# Input
arr7 = np.arange(9).reshape(3,3)

# Your solution goes here
```

Q8. Subtract the mean of each row of the given 2D array, “arr8”, from the values in the array. Set the updated array in “transformed_arr8”.

To get the mean along the row axis, you can use the *numpy.mean* method, `mean(axis=1, keepdims=True)`.

```
# Input
arr8 = np.random.rand(3, 10)

# Your solution goes here
```