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## 4. Introduction to Numpy

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Project0 due Feb 15, 2023 08:59 -03 Completed

Here, we introduce Numpy, a mathematics framework for Python.


## Fundamentals of Numpy



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## Randomization

1.0/1 point (graded)

Write a function called `randomization` that takes as input a positive integer `n`, and returns a `1` Numpy array.

**Available Functions:** You have access to the NumPy python library as `np`

**Grader note::** If the grader appears unresponsive and displays "Processing", it means (the grader) has crashed. Please resubmit your answers, and leave a message in the forum and we will v as possible.

```
1 def randomization(n):
```

CORRECT

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You have used 3 of 25 attempts

Here, we learn how to find dimensions and apply matrix multiplication using Numpy arrays.


## Matrix Properties and Operations




▶ 0:00 / 0:00


▶ 1.0x

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## Operations

1.0/1 point (graded)

Write a function called `operations` that takes as input two positive integers `h` and `w`, and returns two matrices `A` and `B`, of size `h x w`, and returns `A`, `B`, and `s`, the sum of `A` and `B`.

```
15 A = np.random.rand(h,w)
```

Press ESC then TAB or click outside of the code editor to exit

Correct

## Test results

CORRECT

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Here, we learn how to find the maximum and minimum values in a Numpy array and ob

## Max, Min, and Norm




▶ 0:00 / 0:00


▶ 1.0x

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```
6     """
7     A - a Numpy array
8     B - a Numpy array
9     Returns:
10    s - the L2 norm of A+B.
11    """
12    S = A + B
13    s = np.linalg.norm(S)
14    return s
15    raise NotImplementedError
```

Press ESC then TAB or click outside of the code editor to exit

Correct

## Test results

**CORRECT**

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## Discussion

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