

Python Masterclass-5 Assignment

Array Adventure

Task:

You embark on an exciting array adventure where you'll encounter various challenges related to NumPy arrays and their operations. Your task is to write a Python program that allows you to overcome these challenges and progress in your array adventure.

Requirements:

1. Create a function to display the available array challenges to the player.
2. Implement a function to create and display a NumPy array based on user input.
3. Create a function to perform basic operations on arrays, such as finding the sum, mean, maximum, or minimum value.
4. Implement a function to reshape an array and display the reshaped version.
5. Create a function to perform element-wise mathematical operations on arrays, such as addition, subtraction, multiplication, or division.
6. Implement a function to check if two arrays are equal or not.
7. Provide feedback and rewards to the player for completing each challenge.

Hints:

1. Import the NumPy library using `import numpy as np`.
2. Utilize NumPy functions and methods to perform various operations on arrays.
3. Use the `input()` function to prompt the player for their choices and inputs.
4. Encourage players to experiment and try different array operations.