**Code:**

**# Python program to demonstrate**

**# array creation techniques**

**import numpy as np**

**# Creating array from list with type float**

**a = np.array([[1, 2, 4], [5, 8, 7]], dtype = 'float')**

**print ("Array created using passed list:\n", a)**

**# Creating array from tuple**

**b = np.array((1 , 3, 2))**

**print ("\nArray created using passed tuple:\n", b)**

**# Creating a 3X4 array with all zeros**

**c = np.zeros((3, 4))**

**print ("\nAn array initialized with all zeros:\n", c)**

**# Create a constant value array of complex type**

**d = np.full((3, 3), 6, dtype = 'complex')**

**print ("\nAn array initialized with all 6s."**

**"Array type is complex:\n", d)**

**# Create an array with random values**

**e = np.random.random((2, 2))**

**print("\nA random array:\n", e)**

**# Create a sequence of integers**

**# from 0 to 30 with steps of 5**

**f = np.arange(0, 30, 5)**

**print("\nA sequential array with steps of 5:\n", f)**

**# Create a sequence of 10 values in range 0 to 5**

**g = np.linspace(0, 5, 10)**

**print ("\nA sequential array with 10 values between"**

**"0 and 5:\n", g)**

**# Reshaping 3X4 array to 2X2X3 array**

**arr = np.array([[1, 2, 3, 4],**

**[5, 2, 4, 2],**

**[1, 2, 0, 1]])**

**newarr = arr.reshape(2, 2, 3)**

**print ("\nOriginal array:\n", arr)**

**print ("Reshaped array:\n", newarr)**

**# Flatten array**

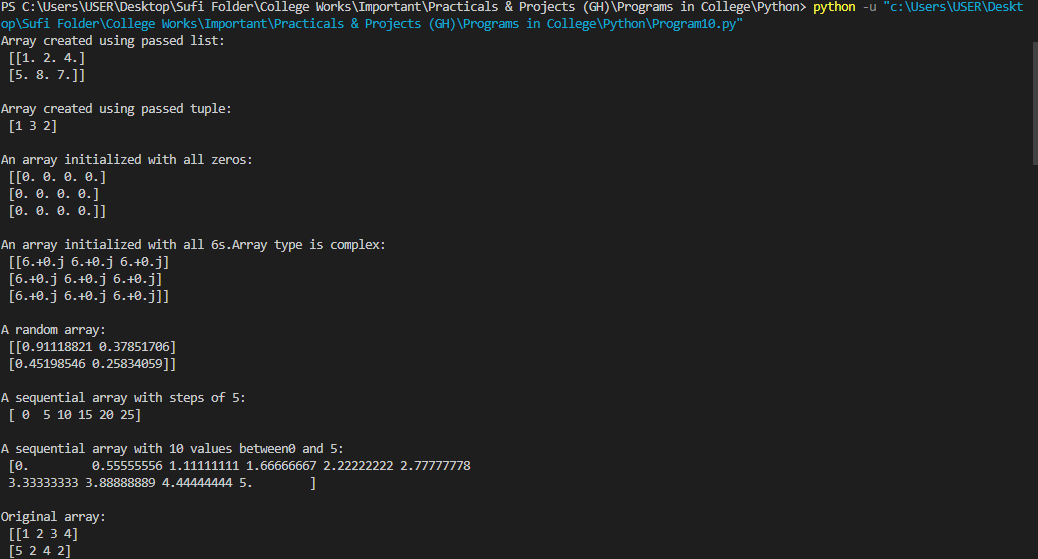
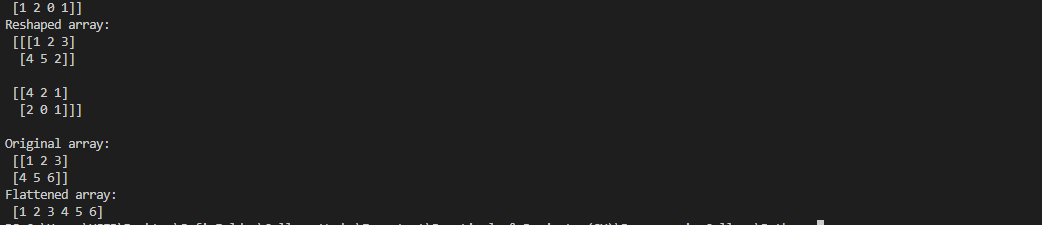
**arr = np.array([[1, 2, 3], [4, 5, 6]])**

**flarr = arr.flatten()**

**print("\nOriginal array:\n", arr)**

**print("Flattened array:\n", flarr)**

**Output:**

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