Task:1

Passing list

Program 1

```
========== RESTART: C:\python\spri
Numpy Array: [[1 2 3 4 5 6 7 8]]
Data Type of numbers: int64
```

Program 2:

```
[[[1 2 3]
  [4 5 6]
  [7 8 9]]]
```

Task:2

OPERATORS

ARANGE:

```
========== RESTART: C:\python\sprint3\ta
[ 0  1  2  3  4  5  6  7  8  9 10]
[1 3 5 7 9]
```

ZEROS AND ONES:

```
========== RESTART: C:\python
Matrix filled with zeros:
 [[0 0 0]
 [0 0 0]
 [0 0 0]]
Matrix filled with ones:
 [[1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]
 [1 1 1 1 1 1 1 1 1 1]]
```

LINSPACE:

```
------------------ RESTART: C:\python\sprint3\taskpractice1.py -----------------
[ 1.          1.41666667  1.83333333  2.25        2.66666667  3.08333333
  3.5         3.91666667  4.33333333  4.75        5.16666667  5.58333333
  6.          6.41666667  6.83333333  7.25        7.66666667  8.08333333
  8.5         8.91666667  9.33333333  9.75       10.16666667 10.58333333
 11.        ]
```

IDENTITY MATRIX:

```
================== RESTART: C:
[[1 0 0 0]
 [0 1 0 0]
 [0 0 1 0]
 [0 0 0 1]]
```

RANDOM PACKAGE:

```
================== RESTART: C:\python\sprint3\taskpractice1.py
[0.18484583 0.73545423 0.56486503 0.08907105]
```

RANDN:

```
------------------ RESTART: C:\python\
[-1.57630741 -0.97503195]
```

```
------------------ RESTART: C:\python\sprint3\taskpractice1.py -----------------
[[-0.19721029  1.07785755 -1.29151841  0.51927331 -1.70574597 -0.75170349]
 [-0.45253728  0.20444743  0.9571078  -1.46585598 -0.26683982 -1.01612628]
 [ 0.61001993  0.65765391 -1.04772492  0.05470843  1.9945243   0.51678316]
 [ 0.84140301 -1.63755291 -0.24534431  0.800805    1.14073797  1.41186417]
 [ 0.87967879  0.10776112  1.33902148 -1.35324409 -1.6267254  -2.5426234 ]
 [-0.0211278   0.07745836  0.61247503  1.33478825 -0.44511278  1.6027943 ]]
```

RANDINT:

```
========== RESTART: C:
[5 5 5 4 4 5 2 1 3 2]
```

ARRAY AND ATTRIBUTES:

ARRAY:

```
========== RESTART: C:\python\sprint3\taskpractice1.py ==========
[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
 24]
```

RANDOM:

```
========== RESTART: C:\python\sprint3\taskprac
10 random integer: [36 37 16  4 24 18 34  4 33  6]
```

SHAPE:

```
========== RESTART: C:\pyt
a: [[1 2 3]
 [4 5 6]]
Shape of array a: (2, 3)
```

RESHAPE:

```
========== RESTART: C:\p
[[1 2 3]
 [4 5 6]]
```

MINIMUM:

```
========== RESTART: C:\python\sprint
numbers: [3 4 8 2 9]
Minimum nuber in array: 2
```

TASK:3

ARGUMENT FUNCTION:

```
========== RESTART: C:\python\t
Index of maximum value of array: 4
```

SLICING:

```
================== RESTART: C:\python\sprint3\taskpractice1
[1000 1000 1000 1000 1000    6    7    8    9   10]
```

INDEXING:

```
================== 
[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

ARITHMETIC OPERATORS:

```
Array: [ 1  2  3  4  5  6  7  8  9 10]
Addition: [ 2  4  6  8 10 12 14 16 18 20]
Subraction: [0 0 0 0 0 0 0 0 0 0]
Multiplication: [  1   4   9  16  25  36  49  64  81 100]
Division: [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]
```

UNIVERSAL ARRAY:

```
a: [ 1  2  3  4  5  6  7  8  9 10]
b: [ 1  2  3  4  5  6  7  8  9 10]
Addition: [ 2  4  6  8 10 12 14 16 18 20]
Subraction: [0 0 0 0 0 0 0 0 0 0]
Multiplication: [  1   4   9  16  25  36  49  64  81 100]
Division: [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]
```

TRIGONOMETRIC:

```
================== RESTART: C:\python\sprint3\taskpracticel.py ==========
sine value: [ 0.0000000e+00  1.0000000e+00  1.2246468e-16 -1.0000000e+00
 -2.4492936e-16]
cosine value: [ 1.0000000e+00  6.1232340e-17 -1.0000000e+00 -1.8369702e-16
  1.0000000e+00]
```

EXPONENTIATION:

```
[25 16 25 81 64  9]
```

SQUARE ROOT:

```
================== REST
[2 3 4 5 5]
```

MATRIX :

```
================== REST
[2 3 4 5 5]
[[ 1  4  9]
 [16 25 36]
 [49 64 81]]
```