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Darsh jain outputs
1D Array:
 [1 2 3 4 5]

2D Array:
 [[1 2 3]
 [4 5 6]]

Array of zeros:
 [[0. 0. 0.]
 [0. 0. 0.]]

Array of ones:
 [[1. 1.]
 [1. 1.]
 [1. 1.]]

Array using arange:
 [0 2 4 6 8]

Element at index 1 (1D): 2
Element at (0, 1) (2D): 2

Slice 1D Array [1:4]: [2 3 4]
Slice 2D Array [0:2, 1:3]:
 [[2 3]
 [5 6]]

Boolean Indexing (values > 2)
 [3 4 5]

Addition: [5 7 9]
Subtraction: [-3 -3 -3]
Multiplication: [ 4 10 18]
Division: [0.25 0.4  0.5 ]

Sum: 6
Mean: 2.0
Standard Deviation: 0.816496580927726

Matrix Multiplication:
 [[19 22]
 [43 50]]
```

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Determinant of matrix_c: 10.000000000000002

Solution to linear equations (Ax = B):
 [1. 1.]

Correlation between arrays: -0.9999999999999999
Covariance between arrays: -2.5

Sorted Array: [1 2 3 5 8]
Elements greater than 4 : [5 8]
```
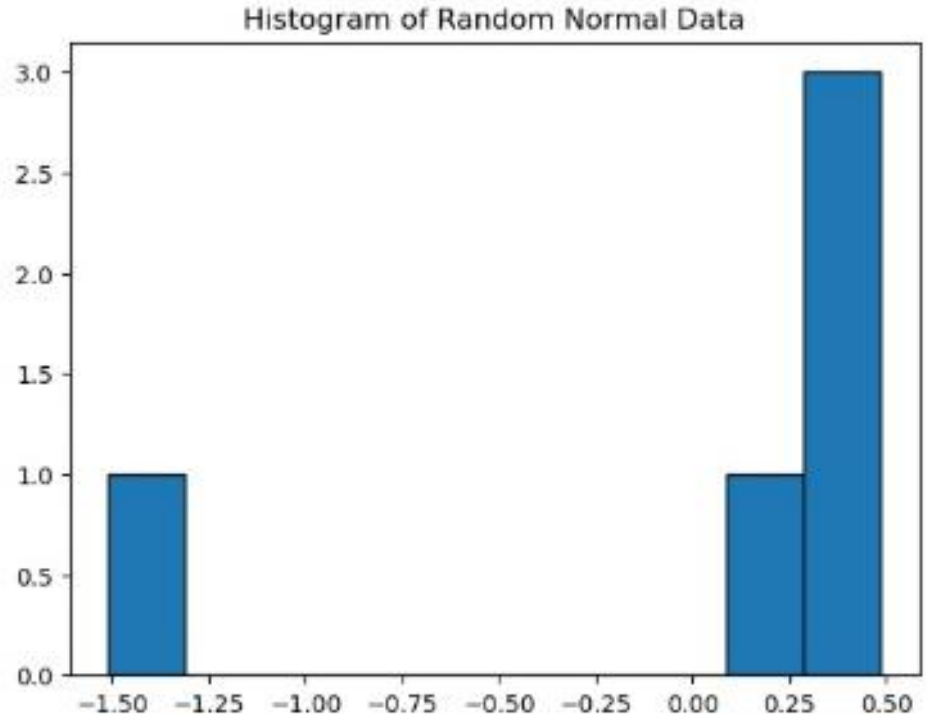

```
Random Uniform: [5.66424726 6.3301132  3.16480339 2.91223723 4.65871675]
Random Normal: [-1.50898177  0.48594466  0.32722625  0.14176565  0.4693722 ]
Random Integers: [8 8 5 7 1]
```




```
Transpose of matrix_a:
 [[1 3]
 [2 4]]
```