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Welcome to the NumPy Analyzer!

===== MAIN MENU =====
1. Create a NumPy Array
2. Indexing & Slicing
3. Perform Mathematical Operations
4. Combine or Split Arrays
5. Search, Sort, or Filter Arrays
6. Compute Aggregates and Statistics
7. Exit

Enter your choice:  1


Select Array Type:
1. 1D Array
2. 2D Array
3. 3D Array

Enter your choice:  2
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```
Enter number of rows:  2
Enter number of columns:  3
Enter 6 elements:  10 20 30 40 50 60

Array Created Successfully:
[[10 20 30]
 [40 50 60]]
```

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Enter your choice:  2


1. Indexing
2. Slicing

Enter your choice:  2
Enter row range (start end):  0 2
Enter column range (start end):  1 3
```

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Sliced Array:
[[20 30]
 [50 60]]
```

```
Enter your choice:  3


1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Dot Product

Enter your choice:  1
Enter same size array elements:  5 5 5 5 5 5

Result:
 [[15 25 35]
 [45 55 65]]
```

```
Enter your choice:  4


1. Combine Arrays
2. Split Array

Enter your choice:  1
Enter second array elements:  1 2 3 4 5 6

Combined Array (Vertical Stack):
[[10 20 30]
 [40 50 60]
 [ 1  2  3]
 [ 4  5  6]]
```

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Enter your choice:  5


1. Search a value
2. Sort the array
3. Filter values

Enter your choice:  2

Sorted Array:
[10 20 30 40 50 60]
```

```
Enter your choice:  6


1. Sum
2. Mean
3. Median
4. Standard Deviation
5. Variance
6. Minimum
7. Maximum
8. Percentile
9. Correlation Coefficient

Enter your choice:  2

Mean: 35.0
```

```
Enter your choice:  7
Thank you for using the NumPy Analyzer! Goodbye!
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