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```python
import numpy as np

# Matrix operations
A = np.array([[1, 2], [3, 4]])
B = np.array([[5, 6], [7, 8]])

# Addition
addition = np.add(A, B)
print("Addition:\n", addition)

# Subtraction
subtraction = np.subtract(A, B)
print("Subtraction:\n", subtraction)

# Multiplication
multiplication = np.matmul(A, B)
print("Multiplication:\n", multiplication)

# Horizontal and vertical stacking
C = np.array([9, 10])
horizontal_stack = np.hstack((A, C.reshape(2, 1)))
print("Horizontal Stack:\n", horizontal_stack)

D = np.array([[11], [12]])
vertical_stack = np.vstack((B, D))
print("Vertical Stack:\n", vertical_stack)

# Custom sequence generation
sequence = np.arange(0, 10, 2)  # Start: 0, End: 10, Step: 2
print("Sequence:\n", sequence)

# Arithmetic and statistical operations
arr = np.array([1, 2, 3, 4, 5])

# Mean
mean = np.mean(arr)
print("Mean:", mean)

# Standard deviation
std_dev = np.std(arr)
print("Standard Deviation:", std_dev)

# Mathematical operations
exp_arr = np.exp(arr)
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print("Exponential:", exp_arr)

# Bitwise operators
x = np.array([1, 2, 3], dtype=np.uint8)
y = np.array([4, 5, 6], dtype=np.uint8)

# Bitwise AND
bitwise_and = np.bitwise_and(x, y)
print("Bitwise AND:", bitwise_and)

# Copying and viewing arrays
arr_copy = arr.copy()
print("Array Copy:", arr_copy)

arr_view = arr.view()
print("Array View:", arr_view)

# Data stacking, searching, sorting, counting, broadcasting
data = np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]])

# Data stacking
stacked_data = np.stack((data, data*2))
print("Stacked Data:\n", stacked_data)

# Searching
index = np.where(data == 5)
print("Index of 5:", index)

# Sorting
sorted_data = np.sort(data, axis=0)
print("Sorted Data:\n", sorted_data)

# Counting
count = np.count_nonzero(data > 3)
print("Count:", count)

# Broadcasting
scalar = 2
broadcasted_data = data * scalar
print("Broadcasted Data:\n", broadcasted_data)
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