Python for Data Science Cheat Sheet

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Array Creation

- **np.array():** Creates an array from a list or tuple.
- **np.zeros():** Generates an array filled with zeros.
- **np.ones():** Generates an array filled with ones.
- **np.arange(start, stop, step):** Creates an array with evenly spaced values within a range.
- **np.linspace(start, stop, num):** Generates an array with evenly spaced numbers between two values.
- **np.eye(n):** Creates an identity matrix.
- **np.full(shape, fill_value):** Creates an array filled with a specified value.
- **np.empty():** Allocates an array without initializing its values.

Array Operations

- **np.add(a, b):** Element-wise addition of arrays.
- **np.subtract(a, b):** Element-wise subtraction of arrays.
- **np.multiply(a, b):** Element-wise multiplication.
- **np.divide(a, b):** Element-wise division.
- np.sqrt(a): Computes the square root of each element.
- **np.power(a, b):** Raises each element of a to the power of b.
- **np.mod(a, b):** Element-wise modulus operation.
- **np.clip(a, min, max):** Limits values in an array to a specified range.