**Main Class (App)**

* **Purpose**: This program approximates the value of Euler's constant e using its infinite series expansion.

**How it works:**

* **Input**:
  + The user is prompted to input a number n, which represents the number of terms used in the series to approximate e.
* **BigDecimal**:
  + BigDecimal is used for high-precision arithmetic, which is especially important because factorial values grow quickly, and the precision of regular floating-point numbers (like double) would not be sufficient.

**Steps Taken in the Code:**

1. **Initialize Variables**:
   * valueOfE: This holds the cumulative sum, which will eventually approximate e. It starts at zero.
   * factorial: This holds the factorial of i and is initialized to 1 (1!).
2. **For Loop**:
   * The loop iterates from i = 0 to i = n (where n is the user's input).
   * Inside the loop:
     + **Factorial Calculation**: The factorial is updated iteratively by multiplying it with the current value of i. For example, for i = 2, factorial becomes 1 \* 2, and for i = 3, factorial becomes 2 \* 3, and so on.
     + **Term Calculation**: A new term in the series is calculated and the precision is set to 20 decimal places using RoundingMode.HALF\_UP.
     + **Add to Approximation**: The term is added to valueOfE to incrementally build the approximation.
3. **Result**:
   * After completing the loop, the program prints the computed approximation of e based on n terms.