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- The diagram illustrates the recursive calculation of 5! using the formula $n! = n * (n-1)!$. It consists of two rows of colored boxes connected by arrows.
- Top Row (Results):**
- Yellow box: $5!$
 - Light blue box: $4!$ with $=24$ written below it.
 - Orange box: $3!$ with $=6$ written below it.
 - Pink box: $2!$ with $=2$ written below it.
 - Light green box: $1!$ with $=1$ written below it.
- Bottom Row (Recursive Steps):**
- Yellow box: $5 * 4!$ with $=24$ written below it.
 - Light blue box: $4 * 3!$ with $=6$ written below it.
 - Orange box: $3 * 2!$ with $=2$ written below it.
 - Pink box: $2 * 1!$ with $=1$ written below it.
 - Light green box: 1
- Arrows:** Curved arrows point from the bottom row to the top row, showing the sequence of calculations: $1! \rightarrow 2! \rightarrow 3! \rightarrow 4! \rightarrow 5!$.

```
factorial(5) = 5 * factorial (4)
factorial(4) = 4 * factorial (3)
factorial(3) = 3 * factorial (2)
factorial(2) = 2 * factorial (1)
factorial(1) = 1
```