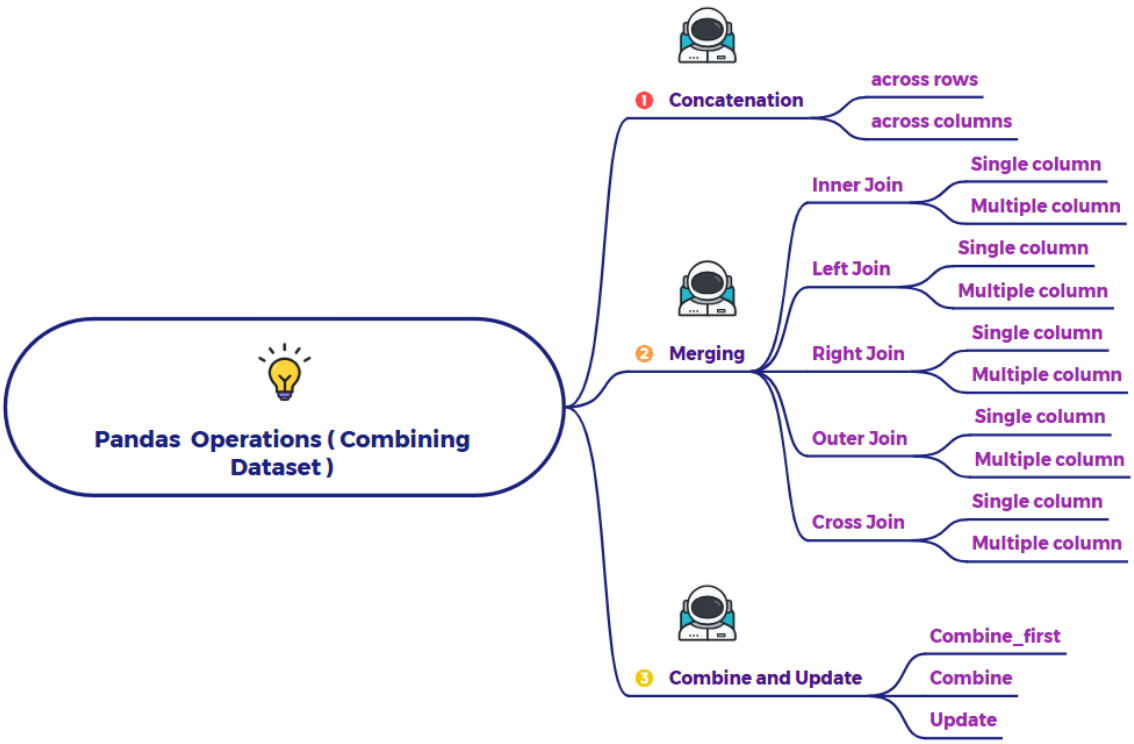
Different ways to combine data?



There are three primary high-level ways to combine data in Pandas:

1. **Concatenation (pd.concat)**:
    - This operation stacks DataFrames either vertically (adding rows, across rows) or horizontally (adding columns, across columns), typically when they share similar column names or index structures, respectively. It's like gluing pieces together along an axis.
2. **Merging (pd.merge / df.join)**:
    - This operation combines DataFrames based on common columns or indices, much like SQL JOIN operations. It links rows from two DataFrames where specified keys match, allowing you to combine related information from different sources (e.g., matching customer IDs in a sales table with customer details in another table).

3. **Combine and Update (df.combine_first, df.combine, df.update)**:
    - These operations focus on element-wise combination or in-place modification of a DataFrame using values from another. They are used for more granular, cell-by-cell blending or updating, especially useful for handling missing values or applying custom logic to overlapping data.