SOS

1. `update_columns_sos_two(row: pd.Series) -> pd.Series`:
    - Purpose: This function takes a row of a DataFrame with filled values for `BusinessNameCorrect`, `AddressCorrect`, and `ZipCorrect`. It ensures that there is a matching name and address to provide updated information.
    - Steps:
        - If both `BusinessNameCorrect` and `AddressCorrect` are True, it appends the original `Business Name`, address, and zip code to corresponding update lists.
        - It updates `BusinessNameFound`, `AddressFound`, and `ZipFound` accordingly.
        - If not, it sets `BusinessNameCorrect` and `AddressCorrect` to False.
    - Returns: An updated row in the DataFrame.
2. `update_sos_columns_one(row: pd.Series) -> pd.Series`:
    - Purpose: This function calculates if the data is correct when compared to Secretary of State (SOS) records. It sets null values for other columns and performs additional data processing.
    - Steps:
        - It checks if the `Business Name` matches SOS records within a certain similarity threshold.
        - It also checks if the `Address` matches SOS records.
        - Based on these checks, it sets `BusinessNameCorrect`, `AddressCorrect`, and `ZipCorrect`.
        - Calls `update_columns_sos_two` to update the columns based on the matching status.
    - Returns: An updated row in the DataFrame.
3. `add_sos_columns(data: pd.DataFrame) -> pd.DataFrame`:
    - Purpose: This function adds columns related to SOS data to the DataFrame and initializes them with default values.
    - Steps:
        - It adds columns like `BusinessNameCorrect`, `BusinessNameUpdate`, `BusinessNameFound`, `AddressCorrect`, `AddressUpdate`, `AddressFound`, `ZipCorrect`, `ZipUpdate`, and `ZipFound`.
        - It also adds similar columns for `Phone`, `Email`, and `Website`.
    - Returns: The DataFrame with added columns.
4. `add_update_columns(data: pd.DataFrame) -> pd.DataFrame`:
    - Purpose: This function adds additional columns to the DataFrame for data updating and initializes them with null values.
    - Steps:
        - It adds columns like `Business Name`, `Address New`, `Zip Code New`, and `City`.
    - Returns: The DataFrame with added update columns.

5. `compare_dataframes_sos(historicalData: pd.DataFrame, newData: pd.DataFrame) -> pd.DataFrame`:
    - Purpose: This function compares old data to new data, deleting duplicate rows, and adding the necessary columns for SOS (Secretary of State) data comparison.
    - Steps:
        - It takes two DataFrames, historicalData, and newData, and compares them based on business names.
        - It adds columns to historicalData for storing updated information.
        - It iterates through historicalData rows and searches for matching names in newData.
        - If a match is found, it updates the columns with new data.
        - Finally, it calls `add_sos_columns` to initialize additional SOS-related columns and applies `update_sos_columns_one` to update the matching status.
    - Returns: A DataFrame containing updated information from SOS.