This project involved several tasks related to using PostgreSQL and regular expressions to process data.

**Formatting Phone Numbers**: A function was created that utilizes a regular expression through the REGEXP\_REPLACE() function to standardize all phone numbers in a column to the format "(XXX) XXX-XXXX".

**Extracting Email from URL**: A query was written using a regular expression to extract records from the Contacts table where the Homepage field contains an email address.

**Postal Code Classification**: The classify\_customer\_by\_postal\_code function was created, using a regular expression to classify customers as Local, National, or International based on the format of their postal code.

**Product Name Validation Trigger**: A trigger was developed to validate whether a product name meets specified criteria, using a regular expression to check for the presence of an uppercase letter and minimum name length.

In each of these tasks, regular expressions were used to search for and/or validate against specific patterns of data, allowing for efficient processing and validation of information in the database.