**Overview of Complete Process/Project**

The project involves processing insurance policies, including creating new policies, renewing existing ones, generating policy reports, and processing insurance claims. The process is implemented in several Cobol programs, each with its specific functionality.

**Programs:**

1. **ClaimProcessing.cbl**: This program processes insurance claims. It checks the date of loss and the cause of the loss to determine the amount of loss. If the claim is valid, it calculates whether the claim amount is within the coverage limits of the policy and processes the claim accordingly.
2. **PolicyCreation.cbl**: This program is responsible for creating new insurance policies. It takes input parameters such as the policy type and the policy holder's information. Based on the policy type, it sets coverage limits and premiums for the new policy.
3. **PolicyRenewal.cbl**: This program handles the renewal of existing insurance policies. It calculates new coverage limits and premiums based on the policy type and policy holder's history. The new coverage limits and premiums are set for the renewal.
4. **PolicyReport.cbl**: The Policy Report program is in charge of generating a summary report of policies. It calculates total premiums collected, total claims paid, and the number of rejected claims. The report includes policy details like policy number, policy type, policy holder's name, and other relevant information.
5. **DB2Init.cbl**: This program is responsible for initializing the DB2 database connection. It simulates opening the connection and preparing the required statements to interact with the DB2 tables.
6. **FetchPolicyData.cbl**: This program fetches policy data from the DB2 database. It retrieves information like policy number, policy holder's name, premium amount, coverage limits, age, car value, property type, and property value from the database tables.
7. **SortPolicyData.cbl**: The Sort Policy Data program sorts the fetched policy data in memory based on the Policy Number using the Merge Sort algorithm. This sorting ensures that the report generated later will have the policies in ascending order of their policy numbers.
8. **CalculatePremium.cbl**: This program calculates the premium amount for each policy based on various factors like the policy type, age, car value, and property type. The calculated premium amount is used later for generating the policy report.
9. **GenerateReport.cbl**: The Generate Report program takes the sorted and calculated policy data and creates a summary report of policies. The report includes details like policy number, policy holder's name, premium amount, coverage limits, age, car value, property type, property value, and coverage amount.
10. **DB2Close.cbl**: This program closes the DB2 database connection. It simulates closing the connection after all required operations have been performed.

**Input and Output:**

* **Input:** The input for the process can be provided in various ways, including user input, data fetched from DB2 tables, or parameters passed between programs.
  + For PolicyCreation.cbl and PolicyRenewal.cbl, the input would include policy type, policy holder's information, and other relevant policy details.
  + For ClaimProcessing.cbl, the input would include the date of loss and the cause of the loss.
  + For FetchPolicyData.cbl, the input would be used to identify and retrieve policy data from the DB2 tables.
* **Output:** The output of the process includes policy reports, claim processing results, and any relevant messages or indicators of successful or unsuccessful operations. The generated report would include details of policy data sorted by policy number.

**Cobol Code:**



















