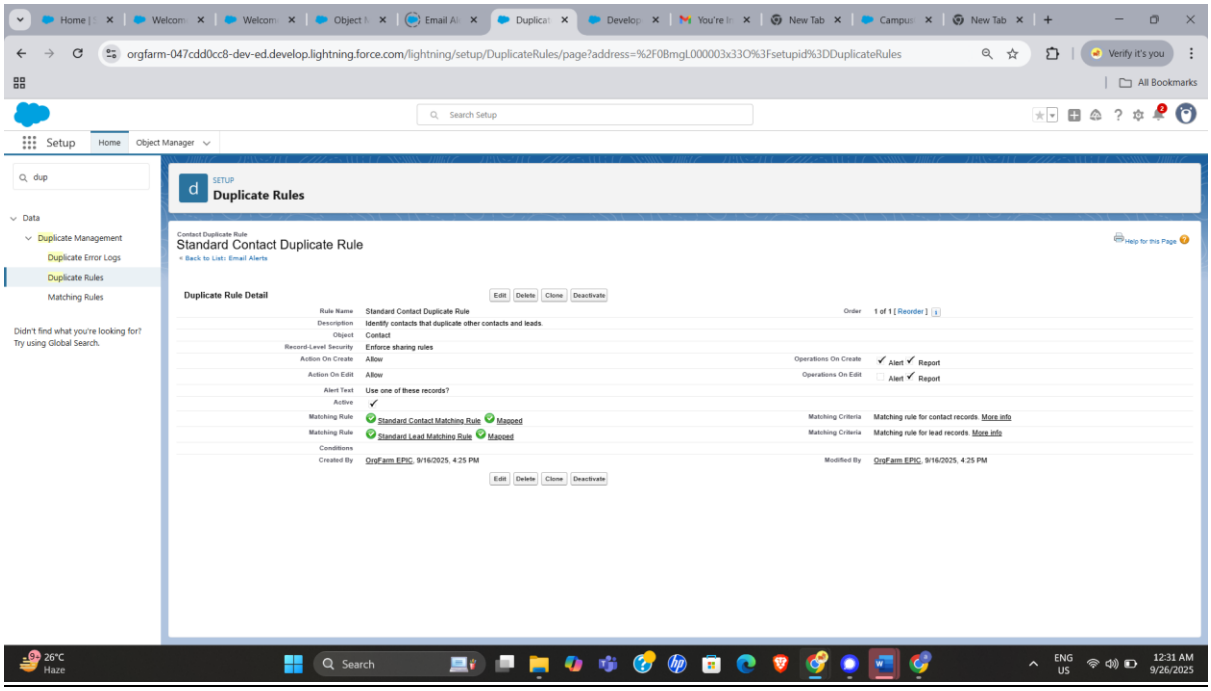
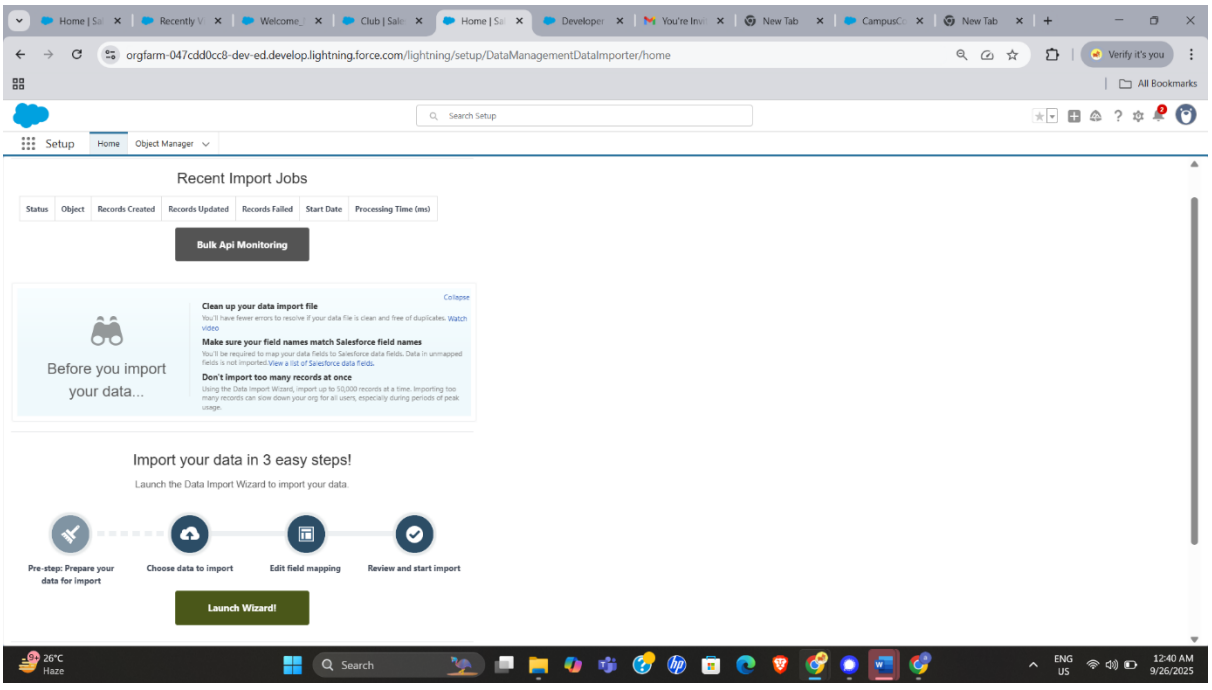
Phase 8: Data Management & Deployment (Campus CRM + Student Club)

Duplicate Rules:-



Here we upload data:-

By clicking launch wizard:-



Documentation:-

Data Import Wizard

- Web-based, simple import tool in Salesforce Setup.
- Supports importing **standard and custom objects** (e.g., Students, Clubs, Club Memberships).
- Allows mapping CSV columns to Salesforce fields.
- Supports basic duplicate management during import.
- Example: Import bulk student data (Name, Email, Year, Branch, Mood).

Data Loader

- Desktop client for bulk data operations: **Insert, Update, Upsert, Delete, Export**.
- Supports up to millions of records efficiently.
- Allows mapping **external IDs** for upsert operations.
- Example: Bulk import ClubMembership__c with Student and Club references using record IDs.

Duplicate Rules

- Prevent creation of duplicate records based on **matching rules**.
- Can **block** or **allow with alert** duplicates.
- Example: Ensure no student is registered twice for the same club.
- Works with **standard and custom objects**.

Data Export & Backup

- Salesforce provides **weekly or monthly export** options.
- Can export standard and custom objects in CSV format.
- Supports automated backup scheduling.
- Example: Export all ClubEvent__c and Volunteer__c records for offline reporting.

Change Sets

- Declarative deployment tool for **moving metadata** (objects, fields, layouts, flows) between orgs.

- Components can be added to **Outbound Change Set** → deployed to target org (e.g., sandbox → production).
- Example: Deploy Club__c, ClubMembership__c objects, and page layouts from dev org to QA org.

Unmanaged vs Managed Packages

- **Unmanaged Package:** Source code and metadata are visible; can be customized.
- **Managed Package:** IP-protected; updates handled via AppExchange; used for ISV apps.
- Example: CampusConnect customizations delivered as **unmanaged package** to another dev org for testing.

ANT Migration Tool

- Command-line tool for metadata deployment.
- Uses XML configuration to **retrieve/deploy components**.
- Useful for scripted or automated deployments.
- Example: Deploy ClubEvent__c record types, flows, and validation rules between orgs.

VS Code & SFDX (Salesforce DX)

- **VS Code**: IDE for Salesforce development.
- **SFDX**: CLI for modern development workflow: **scratch orgs, source control, metadata deployment**.
- Example: Pull source from sandbox → commit to Git → push to production using SFDX commands.
- Enables **version control and continuous integration**.

Phase 8 Key Takeaways:

- Salesforce provides multiple tools for **importing, exporting, backing up, and deploying data and metadata**.
- **Data Loader** and **Import Wizard** handle data.
- **Change Sets**, **ANT**, and **SFDX** handle metadata.
- **Duplicate Rules** ensure data integrity. This phase ensures CampusConnect CRM can **scale, migrate, and maintain clean data** efficiently.