Make a database connection and retrieve records into class variables (arrays)



Make a Thread Pool of size=no of records in database



Make worker threads



Add worker threads to the thread pool



Execute them until completion of all thread in a parallel fashion

Approach

- Since every thread is making a separate smtp connection with the smtp server in parallel
- Every thread has its own message that has to be sent after authentication so one message is sent on a separate smtp connection.
- This kind of asynchronous communication ensures that we send all the connection+message sending requests in one go and wait for the smtp server to do its job.

Set host, username, and password and enable tls

Make a session variable for authentication

Create a message packet for the session

Authenticate the credentials with host (smtp connection)

Set the message headers (from,to,subject) and body of the message and send the message

Close the smtp connection

Advantages

Very fast message sending due to parallelization technique and good for smtp servers that allow multiple smtp logins at a time

Disadvantage

When the number of smtp logins that can be made simultaneously by a user is restricted then some messages may not be sent as the connections are denied by the smtp server