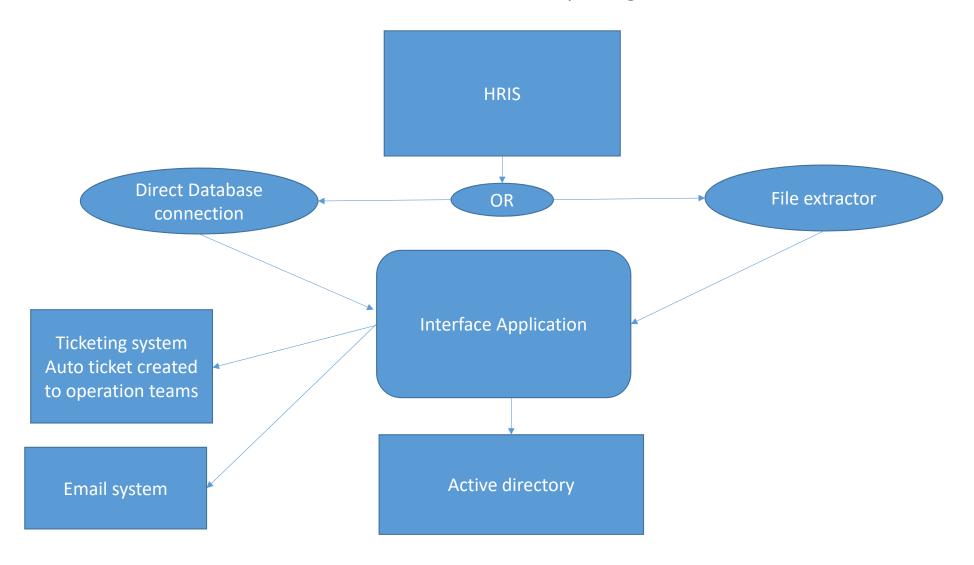
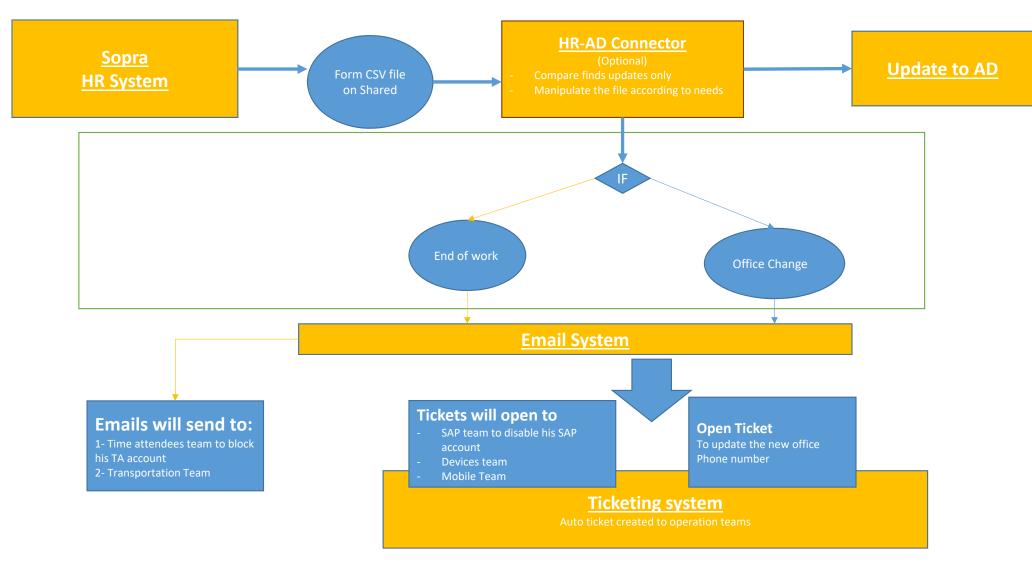
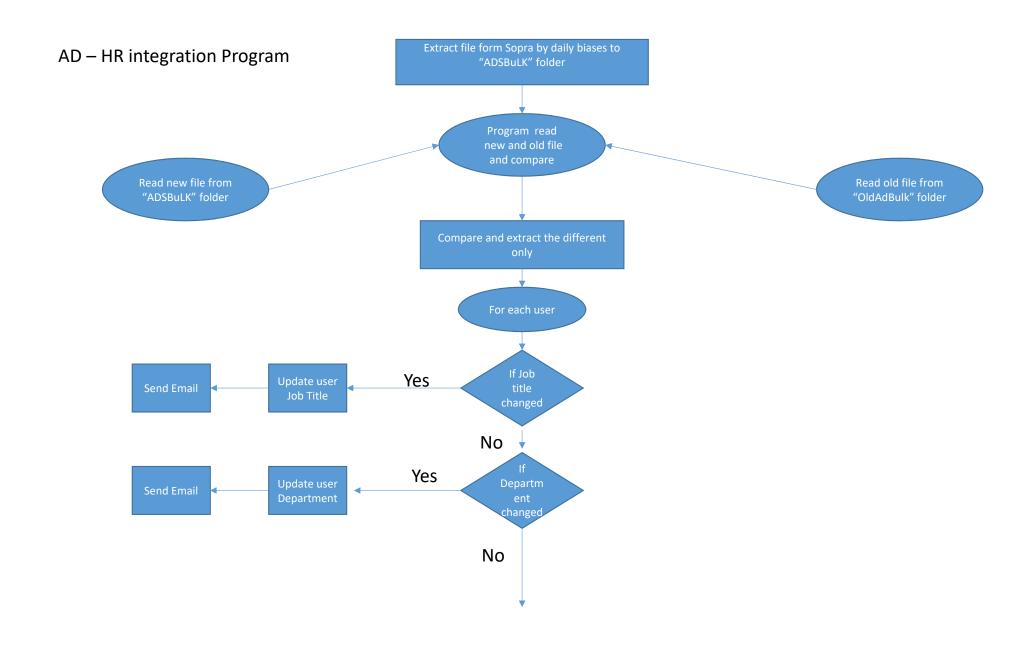
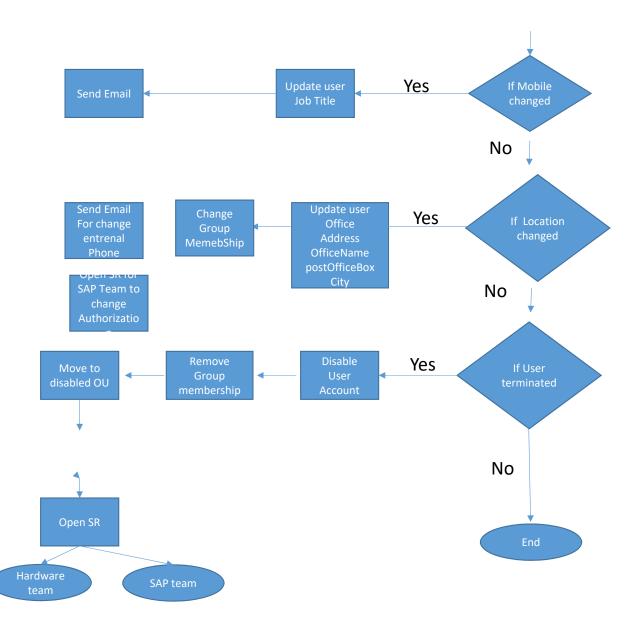
HRIS and Active directory Integration



Integration By File Extractor







Java Code

//@ Sherief Elrweney

package new1; import java.io.BufferedReader; import java.io.BufferedWriter; import java.io.File; import java.io.FileInputStream; import java.io.IOException; import java.io.InputStreamReader; import java.io.FileOutputStream; import java.io.FileReader; import java.io.FileWriter; import java.io.OutputStreamWriter; import java.io.Reader; import java.io.File; import java.io.FileNotFoundException; import java.io.PrintWriter; import java.util.Scanner; import java.util.Set: import java.util.logging.Level; import java.util.logging.Logger; import java.net.URISyntaxException; import java.util.ArrayList; import java.util.Arrays; import java.util.Calendar; import java.util.HashSet; import java.util.List; import java.util.Properties; import java.text.SimpleDateFormat; import javax.mail.*; import javax.mail.internet.*; import javax.activation.*; import com.sun.mail.smtp.SMTPTransport; import java.security.Security; import java.util.Date; import javax.mail.Message; import javax.mail.MessagingException; import javax.mail.Session; import javax.mail.internet.AddressException; import javax.mail.internet.InternetAddress; import javax.mail.internet.MimeMessage; import javax.naming.directory.*; import javax.naming.AuthenticationException; import javax.naming.AuthenticationNotSupportedException; import javax.naming.Context; import javax.naming.NamingEnumeration; import javax.naming.NamingException; import javax.naming.directory.Attributes;

import javax.naming.directory.DirContext;

```
import javax.naming.directory.InitialDirContext;
import javax.naming.directory.SearchControls;
import javax.naming.directory.SearchResult;
import javax.naming.ldap.InitialLdapContext;
import javax.naming.ldap.LdapContext;
import javax.security.auth.login.AppConfigurationEntry;
import javax.naming.directory.BasicAttribute;
import javax.naming.directory.DirContext;
import javax.naming.directory.InitialDirContext;
import javax.naming.directory.ModificationItem;
import javax.xml.transform.ErrorListener;
import java.util.Hashtable;
import javax.naming.ldap.Control;
import javax.naming.ldap.InitialLdapContext;
import javax.naming.ldap.LdapContext;
import javax.naming.ldap.PagedResultsControl;
import javax.naming.ldap.PagedResultsResponseControl;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
//import com.ma.model.AppUserToAD;
//import com.ma.model.Non_GAppUserFromAD;
//import com.ma.properties.Params;
public class adbulk1 {
    @SuppressWarnings("unlikely-arg-type")
    public static void main(String[] args) throws IOException, URISyntaxException, NamingException,
AddressException, MessagingException{
         String DATE_FORMAT = "yyyyMMdd";
       SimpleDateFormat sdf =
          new SimpleDateFormat(DATE FORMAT);
       Calendar c1 = Calendar.getInstance(); // today
      // System.out.println("Today is " + sdf.format(c1.getTime()));
    @SuppressWarnings("resource")
    //BufferedReader in1 = new BufferedReader(new FileReader("d://1.csv"));//old
    BufferedReader in1 = new BufferedReader(new
FileReader("//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/OldAdBulk/ADBulkOld.txt"));//old
    @SuppressWarnings("resource")
    //BufferedReader in2 = new BufferedReader(new FileReader("d://2.csv"));//New
    BufferedReader in2 = new BufferedReader(new
FileReader("//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/Test"+sdf.format(c1.getTime())+".txt"));//New
    List<String> log = new ArrayList<String>();
    String str1;
    String str2:
    List<String> list1 = new ArrayList<String>();//old
    List<String> list3 = new ArrayList<String>();
    List<String> list2 = new ArrayList<String>();//New
    List<String> list4 = new ArrayList<String>();
    List<String> list6 = new ArrayList<String>();
    String []gNotKattamya= {"CN=SUZ - Helwan Employees,OU=Distribution
```

```
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Menya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Tourah Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotHelwan=
                          {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Headquarter Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Menya Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Suez Bags Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Tourah Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotSuez=
                         {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Menya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Helwan Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Tourah Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotSuezBags= {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Menya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Helwan Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Tourah Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotHeadQuarter= {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Menya Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Helwan Employees, OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Tourah Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotTourah=
                          {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Menya Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Helwan Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gNotMenya=
                          {"CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Tourah Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Helwan Employees, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
    String []gManagers=
                         {"CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Kattameya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Helwan Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Menya Managers, OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Suez Bags Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", "CN=SUZ - Suez Managers, OU=Distribution
```

```
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net","CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"};
   Hashtable<String, String> env = new Hashtable<String, String>();
  String adminName = "":
 //String adminName = "kkkk"; //using user principal name run much fast
  String adminPassword = "";
  String ldapURL = "ldap://suz1332ads01.suz.itcgr.net:389";
  //EGYPT/QUATTAMYIA/Assets/Users
  env.put(Context.INITIAL CONTEXT FACTORY, "com.sun.jndi.ldap.LdapCtxFactory");
 //set security credentials,
  env.put(Context.SECURITY_AUTHENTICATION,"DIGEST-MD5");
  env.put(Context.SECURITY_PRINCIPAL,adminName);
  env.put(Context.SECURITY_CREDENTIALS,adminPassword);
  env.put(Context.PROVIDER URL,ldapURL);
//connect to my domain controller
 env.put(Context.PROVIDER URL,ldapURL);
 //mail setup//
    final String senderEmailID = "u1332000552@suz.itcgr.net";
   // Recipient's email ID needs to be mentioned.
   String to = "s.elrweney@suezcem.com";
   String to1 = "m.kotb@suezcem.com";
   String to2 = "m.eid@suezcem.com";
   String to3 = "ahmed.hassanen@suezcem.com";
  String to4 = "SRSupport@suezcem.com";
   String to5 = "scc-admin@suezcem.com";
  // Sender's email ID needs to be mentioned
  String from = "itsupport@suezcem.com";
  // Assuming you are sending email from localhost
   String host = "smtpgr.itcgr.net";
  // Get system properties
  Properties properties = System.getProperties();
  // Setup mail server
  properties.setProperty("mail.smtp.host", host);
  properties.setProperty("mail.user",senderEmailID);
  properties.setProperty("mail.smtp.starttls.enable", "true");
  //properties.put("mail.smtp.auth", "true");
  //properties.setProperty("mail.user", "s.elrweney@suezcem.com");
  //properties.setProperty("mail.password", senderPassword);
  // Get the default Session object.
  // Authenticator auth = new Authenticator();
  Session session = Session.getDefaultInstance(properties);
```

```
// Create a default MimeMessage object.
     // Session session1 = Session.getInstance(properties, auth);
     MimeMessage message = new MimeMessage(session);
     // Set From: header field of the header.
    // message.setFrom(new InternetAddress(from));
     // Set To: header field of the header.
    // message.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
     // Set Subject: header field
    // message.setSubject("This is the Subject Line!");
     // Now set the actual message
    // message.setText("This is actual message");
     // Send message
//
      Transport.send(message);
    // System.out.println("Sent message successfully....");
  // catch (MessagingException mex)
    // mex.printStackTrace();
    // String command = "powershell.exe \"C:\\Pathtofile\\script.ps\\" ";
while((str1 = in1.readLine()) != null){
       list1.add(str1);
     while((str2 = in2.readLine()) != null){
           list2.add(str2);
         }}
     String[] stringArr2 = list2.toArray(new String[0]);// New File
     list3 = list1://Old File
     list4= list2;//New File
    // System.out.println(list3);
    // System.out.println(list4);
         String[] stringArr1 = list1.toArray(new String[0]);//old file
         //for(int k=0;k<stringArr1.length;k++) {System.out.println(stringArr1[k]);}
         List<String> list7 = new ArrayList<String>();
         for (int i=0; i < stringArr1.length;i++) {
              if((!Arrays.asList(stringArr2).contains(stringArr1[i]))) { list7.add(stringArr1[i]);}}
         String [] old =list7.toArray(new String[0]);
         for (int i=0; i< old.length;i++) {System.out.println("this is different Old "+old[i]);}
         Set<String> ad = new HashSet<String>(list3);//OLD
```

```
Set<String> bd = new HashSet<String>(list4);// NEW
         //Set<String> bd1 = new HashSet<String>();
         bd.removeAll(ad);
         //System.out.println("this is different New "+bd);
         List<String> list5 = new ArrayList<String>();
         list5.addAll(bd);// The different new
         String [] strr5 = list5.toArray(new String[0]);//this is different New
         for (int i=0; i < strr5.length;i++) {System.out.println("this is different New "+strr5[i]);}
         BufferedWriter bw =
         new BufferedWriter (new FileWriter
("//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/DifferentADBulk/different"+sdf.format(c1.getTime())+".t
for (String line : strr5 ){
    bw.write (line);
    bw.newLine();}
bw.close ();
         for (int i=0; i < strr5.length;i++) {String strr6 = strr5[i];
         System.out.println(strr6.substring(0, 6));
         //System.out.println(stringArr1[i].substring(0, 6));
              //System.out.println(stringArr1[i]);Arrays.asList(stringArr1).containsstrr6)
         for (int k=0; k < old.length;k++) {
              if(old[k].substring(0, 6).equals(strr5[i].substring(0, 6)))
                   //list6.add(stringArr1[i1]);
              // String [] strr7 =list6.toArray(new String[0]);
                   System.out.println("i need this " +strr5[i]+ " :: "+ old[k]);
                   String [] parts1=old[k].split(";");
                   String [] parts=strr5[i].split(";");
                   for (int o=0; o< parts1.length;o++) {System.out.println("i need this also OLD " + parts1[o]+" ::
NEW "+parts[o]);}
                   System.out.println("i need this also new "+parts[3]);
LdapContext ctx = new InitialLdapContext(env,null);
                 SearchControls searchCtls = new SearchControls();
                 SearchControls searchCtlsg = new SearchControls();
                 SearchControls searchCtlsManager = new SearchControls();
                //Specify the search scope
                  searchCtls.setSearchScope(SearchControls.SUBTREE_SCOPE);
                  searchCtlsg.setSearchScope(SearchControls.SUBTREE SCOPE);
                  searchCtlsManager.setSearchScope(SearchControls.SUBTREE_SCOPE);
                 //specify the LDAP search filter for USER
                  String searchFilter = "(&(objectClass=user)(sAMAccountName="+parts[1]+"))";
                  //specify the LDAP search filter for USER
                  String searchFilterMangaer = "(&(objectClass=user)(sAMAccountName="+parts[9]+"))";
                 //Specify the Base for the search
                  String searchBase = "DC=suz,DC=itcgr,DC=net";
```

```
//initialize counter to total the group members
                int totalResults = 0;
               //Specify the attributes to return
                String returnedAtts[]={"distinguishedName"};// for user
                String returnedAttsG[]={"memberOf"};// for Groups
                String returnedAttsManager[]={"distinguishedName"};// for Manager
                searchCtls.setReturningAttributes(returnedAtts);//for User
                searchCtlsg.setReturningAttributes(returnedAttsG); // for groups
                searchCtlsManager.setReturningAttributes(returnedAttsManager); // for manager
               //Search for objects using the filter
                NamingEnumeration<?> answer = ctx.search(searchBase, searchFilter, searchCtls); //for user
                NamingEnumeration<?> answerG = ctx.search(searchBase, searchFilter, searchCtlsg);//for groups
                NamingEnumeration<?> answerManager = ctx.search(searchBase, searchFilterMangaer,
searchCtlsManager);//for manager
               //Loop through the search results
                // while (answer.hasMoreElements()) {
                    SearchResult sr = (SearchResult)answer.next();
                   SearchResult srG = (SearchResult)answerG.next();//for groups
                  SearchResult srManager = (SearchResult)answerManager.next();//for Manager
                    //System.out.println(">>>" + sr.getName());
                   //Print out the members
                    Attributes attrs = sr.getAttributes();
                    Attributes attrsG = srG.getAttributes();//For Groups
                    Attributes attrsManager = srManager.getAttributes();//For Manager
                    // if (attrs != null) {
                      //for (NamingEnumeration<?> ae = attrs.getAll();ae.hasMore();) {
                                      //Attribute attr = (Attribute)ae.next();
                                   //System.out.println("Attribute: " + attr.getID());
                                    //for (NamingEnumeration<?> e = attr.getAll();e.hasMore();totalResults++) {
                                        NamingEnumeration<?> e = attrs.getAll();
                                        String test= (String) e.nextElement().toString();
                                         String userName = test.substring(19);
                                      // System.out.println( test.substring(19));
        NamingEnumeration<?> eM = attrsManager.getAll();
                                             String Manager= (String) eM.nextElement().toString();
                                             String userNameManager = Manager.substring(19);
                                             System.out.println( "User Manager :"+userNameManager);
        NamingEnumeration<?> aeg = attrsG.getAll();
                                        // Attribute attrg = (Attribute)aeg.nextElement();
                                         List<String> listg = new ArrayList<String>();
                                         if (aeg.hasMoreElements()) {Attribute attrg =
(Attribute)aeg.nextElement();
                                         System.out.println("Attribute: " + attrg.getID());
                                        // String [] groups= new String[totalResults++];
```

```
for ( aeg = attrg.getAll();aeg.hasMore();totalResults++) {
                                      listg.add(aeg.next().toString());}}
                                   String [] Groups = listg.toArray(new String[0]);
                                   // String [] Groups =listg.toArray(new String[0]);
                                      // System.out.println("Attribute: " +listg);
                                  // String [] Groups =listg.toArray(new String[0]);
                                   for (int m=0;m<Groups.length;m++) {System.out.println(Groups[m]);}
/*
////////////
////////
if (!parts1[5].equals(parts[5])&& parts1[0].equals(parts[0])) {ModificationItem mods[] = new ModificationItem[1];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("mobile","(+20)"+
parts[5]));
//mods[1]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("Department", parts[6]));
//update the group
ctx.modifyAttributes(userName,mods);
//ctx.close();
System.out.println( test.substring(19));
System.out.println( parts[5]+"iiiiiii"+parts1[5]);
MimeMessage message1 = new MimeMessage(session);
// Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
// Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
// Set Subject: header field
message1.setSubject("The mobile Phone Number for the user "+parts[1]+" has been changed");
// Now set the actual message
message1.setText("The mobile Phone Number for the user "+parts[1]+" has been changed to "+parts[5]);
log.add("The mobile Phone Number for the user "+parts[1]+" has been changed to "+parts[5]);
// Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
```

```
// break;
// for(int k1=0;k1<strr7.length;k1++) {
//String test3 = strr7[k1];
//System.out.println(strr5[t]);
//String[] parts2 = test3.split(","); */
//////////
////////////
/////////
if (!parts1[2].equals(parts[2]) && parts1[0].equals(parts[0]))
{ ModificationItem mods[] = new ModificationItem[1];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("title", parts[2]));
//mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("Department", parts[6]));
//update the group
ctx.modifyAttributes(userName,mods);
// ctx.close();
System.out.println( test.substring(19));
System.out.println( parts[2]+"iiiiiii"+parts1[2]);
MimeMessage message2 = new MimeMessage(session);
// Set From: header field of the header.
message2.setFrom(new InternetAddress(from));
// Set To: header field of the header.
message2.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
// message2.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
// message2.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
// message2.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
// break;
// Set Subject: header field
message2.setSubject("The Job Title for the user ""+parts[1]+"' has been changed");
// Now set the actual message
message2.setText("The Job Title for the user "+parts[1]+" has been changed from "+ parts1[2]+" to "+parts[2]);
// Send message
Transport.send(message2);
//System.out.println("Sent message successfully....");
```

```
//ctx.close();
log.add("The Job Title for the user "+parts[1]+" has been changed from "+ parts1[2]+" to "+parts[2]);
//////////
if (parts1[0].equals(parts[0])) { if (!parts1[13].equals(parts[13]) || (!parts1[8].equals(parts[8]))) {
   ModificationItem mods[] = new ModificationItem[1];
   String newParts13:
   int p13 = parts[13].length();
   int p8 = parts[8].length();
   int newLength = p13+p8;
   String newDeprt = parts[8]+ " - " + parts[13];
   System.out.println( "Department lentgh" + newLength);
   if (newLength> 64) {
       newParts13 = newDeprt.substring(0, 64);
System.out.println( "Department"+ newParts13);
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new
BasicAttribute("Department",newParts13));
//mods[1]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("Department", parts[6]));
//update the group
ctx.modifyAttributes(userName,mods);
//ctx.close();
System.out.println( test.substring(19));
System.out.println( "The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - "+
parts1[13] +" to "+ newParts13):
MimeMessage message1 = new MimeMessage(session);
// Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
// Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
// Set Subject: header field
message1.setSubject("The Department for the user "'+parts[1]+" has been changed");
// Now set the actual message
message1.setText("The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - " + parts1[13]
+" to " + newParts13):
```

```
// Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
log.add("The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - " + parts1[13] +" to " +
newParts13);
    }
    else {mods[0]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new
BasicAttribute("Department", parts[8]+" - " +parts[13]));
    //mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("Department",
parts[6]));
    //update the group
    ctx.modifyAttributes(userName,mods);
    //ctx.close();
    System.out.println( test.substring(19));
    System.out.println( "The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - "+
parts1[13] +" to "+parts[8]+ " - " + parts[13]);
    MimeMessage message1 = new MimeMessage(session);
    // Set From: header field of the header.
    message1.setFrom(new InternetAddress(from));
    // Set To: header field of the header.
    message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
    // message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
    // message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
    // message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
    // Set Subject: header field
    message1.setSubject("The Department for the user "+parts[1]+" has been changed");
    // Now set the actual message
    message1.setText("The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - "+
parts1[13] +" to "+parts[8]+ " - " + parts[13]);
    // Send message
    Transport.send(message1);
    System.out.println("Sent message successfully....");
    log.add("The Department for the user "+parts[1]+" has been changed from "+parts1[8]+" - " + parts1[13] +" to
"+parts[8]+" - " + parts[13]);
    }
}}
///////update user Manager
```

```
if (!parts1[9].equals(parts[9])&& parts1[0].equals(parts[0])) {ModificationItem mods[] = new ModificationItem[1];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new
BasicAttribute("manager",userNameManager));
ctx.modifyAttributes(userName,mods);
System.out.println( test.substring(19));
System.out.println( parts[9]+"iiiiii"+parts1[9]);
MimeMessage message1 = new MimeMessage(session);
// Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
// Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
// Set Subject: header field
message1.setSubject("The Manager for the user ""+parts[1]+"" has been changed");
// Now set the actual message
message1.setText("The Manager for the user ""+parts[1]+" has been changed to "+parts[9]);
// Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
log.add("The Manager for the user "+parts[1]+" has been changed to "+parts[9]);
}
//////////
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Kattameya Plant"))
{ModificationItem mods[] = new ModificationItem[4];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new
BasicAttribute("physicalDeliveryOfficeName", "EGY/Kattameya/K30-Maadi, Ein El-Sokhna Road"));
mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("postOfficeBox",
"2691"));
```

```
mods[2]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("1", "Cairo"));
mods[3]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("streetAddress", "K30")
Maadi/Ein Sokhna Road\r\n" +
"\n" +
"\r\n" +
"P.O. Box 2691\r\n" +
"\r\n" +
"Cairo - Egypt"));
//update the group
//update the group
// mods[4] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//mods[4] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("MEMBER OF", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//ctx.modifyAttributes("CN=AD-IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
ctx.modifyAttributes(userName,mods);
//ctx.close();
String [] userHQ= userName.split(",");
String moveToHqOU=userHQ[0]+
",ou=Users,ou=Assets,ou=QUATTAMYIA,ou=EGYPT,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToHqOU);
System.out.println( test.substring(19));
System.out.println( parts1[10]+" Changed to "+parts[10]);
MimeMessage message1 = new MimeMessage(session);
// Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
// Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
// message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
// Set Subject: header field
message1.setSubject("The office Location for the user "+parts[1]+" has been changed");
// Now set the actual message
message1.setText("The office Location for user "+parts[1]+" has been changed form "+parts1[10]+" to
""+parts[10]+""/r/n"+ " and moved to QUATTAMYIA OU ");
// Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
log.add("The office Location for user "'+parts[1]+"' has been changed form "'+parts1[10]+"' to "'+parts[10]+"'/r/n"+ "
and moved to QUATTAMYIA OU ");
}
//////////
```

```
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Kattameya Plant"))
{ModificationItem mods[] = new ModificationItem[1];
//update the group
//update the group
//mods[4] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//mods[4] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("MEMBER OF", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//ctx.modifyAttributes("CN=AD-IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
//ctx.modifyAttributes(userName,mods);
//ctx.close():
System.out.println( test.substring(19));
for (int a=0;a<gNotKattamya.length;a++) {if ( (Arrays.asList(Groups).contains(gNotKattamya[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gNotKattamya[a], mods);
System.out.println( "Group Removed: "+(gNotKattamya[a]));
log.add("Group "+gNotKattamya[a]+" Removed from user ""+parts[1]);}}
if(!Arrays.asList(Groups).contains("CN=SUZ-SendInternetMail,OU=Security
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ-SendInternetMail,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods):
log.add("Group 'SUZ-SendInternetMail' Added to user "+parts[1]);}
if (!Arrays.asList(Groups).contains("CN=SUZ - Kattameya Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Kattameya Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Kattameya Employees' Added to user "+parts[1]);}
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
```

```
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group Removed form: ""+parts[1]);
//Now set the actual message
message1.setText("Group Removed form: ""+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
}
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Kattameya Plant"))
{ModificationItem mods[] = new ModificationItem[1];
if (Arrays.asList(Groups).contains("CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Kattameva Managers.OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Menya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Bags Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Managers,OU=Distribution
Groups.OU=GROUPS.DC=suz.DC=itcgr.DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||parts[7].equals("MAN")) {
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a]));
log.add("Group "+gManagers[a]+" Removed from user ""+parts[1]);}}
```

```
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Kattameya Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: "" +parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
log.add("Group 'SUZ - Kattameya Managers' Added to user "+parts[1]);
}}
/////////
if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Kattameya Plant")&&
parts[7].equals("MAN") ) {ModificationItem mods[] = new ModificationItem[1];
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a]));
log.add("Group "+gManagers[a]+" Removed from user ""+parts[1]);}}
mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Kattameya Managers,OU=Distribution
```

```
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: "" +parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
log.add("Group 'SUZ - Kattameya Managers' Added to user "+parts[1]);
//////////
/////////Change Office
HeadQuarter/////////
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Headquarters"))
{ModificationItem mods[] = new ModificationItem[4];
mods[0]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new
BasicAttribute("physicalDeliveryOfficeName", "EGY/Cairo-HQ/K30-Maadi, Ein El-Sokhna Road"));
mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("postOfficeBox",
"2691"));
mods[2]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("1", "Cairo"));
mods[3]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("streetAddress", "K30")
Maadi/Ein Sokhna Road\r\n" +
"\r\n" +
"\r\n" +
"P.O. Box 2691\r\ +
"\r\n" +
"Cairo - Egypt"));
//update the group
//update the group
```

```
//mods[4] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//mods[4] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("MEMBER OF", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//ctx.modifyAttributes("CN=AD-IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
ctx.modifvAttributes(userName.mods):
//ctx.close();
String [] userHQ= userName.split(",");
String moveToHqOU=userHQ[0]+
",ou=Users,ou=Assets,ou=QUATTAMYIA,ou=EGYPT,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToHqOU);
System.out.println( test.substring(19));
System.out.println("Location for user: "+ parts1[10]+" has Changed to "+parts[10]);
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to4));
//Set Subject: header field
message1.setSubject("The office Location for the user "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("The office Location for user "+parts[1]+" has been changed form "+parts1[10]+" to
"+parts[10]+"'/r/n"+ " and moved to QUATTAMYIA OU ");
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
log.add("The office Location for user "+parts[1]+" has been changed form "+parts1[10]+" to "+parts[10]+"/r/n"+"
and moved to QUATTAMYIA OU ");
//////Add Headquarter employee
//////Add Internet Email
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Headquarters"))
{ModificationItem mods[] = new ModificationItem[1];
```

```
//Remove other employee groups
for (int a=0;a<gNotHeadQuarter.length;a++) {if ( (Arrays.asList(Groups).contains(gNotHeadQuarter[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gNotHeadQuarter[a], mods);
System.out.println( "Group Removed: "+(gNotHeadQuarter[a]));
log.add("Group "+gNotHeadQuarter[a]+" Removed from user ""+parts[1]);}}
//add send internet mail groups
if(!Arrays.asList(Groups).contains("CN=SUZ-SendInternetMail,OU=Security
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ-SendInternetMail,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods):
log.add("Group 'SUZ-SendInternetMail' Added to user "+parts[1]);}
//Add headquarter employee groups
if (!Arrays.asList(Groups).contains("CN=SUZ - Headquarter Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Headquarter Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Headquarter Employees' Added to user "+parts[1]);}
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group Removed from the use "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("Group Removed from the use "+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
```

```
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Headquarters"))
{ModificationItem mods[] = new ModificationItem[1];
if (Arrays.asList(Groups).contains("CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Kattameya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Menya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Bags Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||parts[7].equals("MAN")){
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a])); } }
mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Headquarter Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
MimeMessage message1 = new MimeMessage(session);
log.add("Group 'SUZ - Headquarter Managers' Added to user "+parts[1]);
System.out.println( "Group manager 'SUZ - Headquarter Managers' Added to: ""+parts[1]);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: ""+parts[1]);
//Now set the actual message
message1.setText("Group manager 'SUZ - Headquarter Managers' Added to: ""+parts[1]);
```

```
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
}}
//////////
//////////
/////////
if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Headquarters") &&
parts[7].equals("MAN") ) {ModificationItem mods[] = new ModificationItem[1];
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", userName)):
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a])); } }
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Headquarter Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
MimeMessage message1 = new MimeMessage(session);
log.add("Group 'SUZ - Headquarter Managers' Added to user "+parts[1]);
System.out.println( "CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: ""+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
```

```
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
/////////Change Office
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Suez Plant")) {ModificationItem
mods[] = new ModificationItem[4];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new
BasicAttribute("physicalDeliveryOfficeName", "EGY/Suez/K70 Maadi, Ein Sokhna Road"));
mods[1]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("postOfficeBox".
"2691"));
mods[2]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("1", "Cairo"));
mods[3]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("streetAddress", "K70
Maadi/Ein Sokhna Road\r\n" +
"\r\n" +
"\r\n" +
"P.O. Box 2691\r\ +
"\r\n" +
"Cairo - Egypt"));
//update the group
//update the group
//mods[4] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//mods[4] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("MEMBER OF", "CN=AD-
IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"));
//ctx.modifyAttributes("CN=AD-IT,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
ctx.modifyAttributes(userName,mods);
//ctx.close();
String [] userHQ= userName.split(",");
String moveToHqOU=userHQ[0]+ ",ou=Users,ou=Assets,ou=SUEZ,ou=EGYPT,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToHqOU);
System.out.println( test.substring(19));
System.out.println( parts1[10]+" has Changed to "+parts[10]);
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
```

```
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("The office Location for the user "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("The office Location for user "+parts[1]+" has been changed form "+parts1[10]+" to
""+parts[10]+""" +""/r/n"+ " and moved to SUEZ OU ");
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
log.add("The office Location for user "+parts[1]+" has been changed form "+parts1[10]+" to "+parts[10]+""
+"'/r/n"+ " and moved to SUEZ OU "):
//////Change Office Suez and remove other employee
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Suez Plant"))
{ModificationItem mods[] = new ModificationItem[1];
//Remove other employee groups
for (int a=0;a<gNotSuez.length;a++) {if ( (Arrays.asList(Groups).contains(gNotSuez[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gNotSuez[a], mods);
System.out.println( "Group Removed: "+(gNotSuez[a]));
log.add("Group "+gNotSuez[a]+" Removed from user ""+parts[1]);}}
//add send internet mail groups
if(!Arrays.asList(Groups).contains("CN=SUZ-SendInternetMail,OU=Security
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ-SendInternetMail,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods):
log.add("Group 'SUZ-SendInternetMail' Added to user "+parts[1]);}
//Add Suez employee groups
if (!Arrays.asList(Groups).contains("CN=SUZ - Suez Employees,OU=Distribution
```

```
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Suez Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Suez Employees' Added to user "+parts[1]);}
MimeMessage message1 = new MimeMessage(session):
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group Removed from the use "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("Group Removed from the use ""+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Suez Plant"))
{ModificationItem mods[] = new ModificationItem[1];
//////////
/////////
if (Arrays.asList(Groups).contains("CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Kattameya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Menya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Bags Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Tourah Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net")
||parts[7].equals("MAN")) {
```

```
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a])); } }
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Suez Managers,OU=Distribution Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
MimeMessage message1 = new MimeMessage(session);
log.add("Group 'SUZ - Suez Managers' Added to user "+parts[1]);
System.out.println( "Group Manager Added: CN=SUZ - Suez Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: ""+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
}}
if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Suez Plant") &&
parts[7].equals("MAN") ) {ModificationItem mods[] = new ModificationItem[1];
//////////
/////////
```

```
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a])); }}
mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Suez Managers,OU=Distribution Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods):
MimeMessage message1 = new MimeMessage(session);
log.add("Group 'SUZ - Suez Managers' Added to user ""+parts[1]);
System.out.println( "Group Manager Added: CN=SUZ - Suez Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: ""+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
}
////////////
//////////
//////////Change Office
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Helwan Plant"))
{ModificationItem mods[] = new ModificationItem[4];
mods[0]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new
BasicAttribute("physicalDeliveryOfficeName", "EGY/Cairo-Helwan/Helwan Cement Plant - Kafr Elelw"));
mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("postOfficeBox", "16"));
```

```
mods[2]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("1", "Cairo"));
mods[3]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("streetAddress", "Kafr Elw
- Helwan\r\n'' +
"\r\n" +
"\r\n" +
"P.O. Box 16 Helwan\r\n" +
"\r\n" +
"Cairo - Egypt"));
//update the group
ctx.modifyAttributes(userName,mods);
//ctx.close();
String [] userHQ= userName.split(",");
String moveToHqOU=userHQ[0]+ ",ou=Users,ou=Assets,ou=HELWAN,ou=EGYPT,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToHqOU);
System.out.println( test.substring(19));
System.out.println( parts1[10]+"has ghanged to"+parts[10]):
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("The office Location for the user "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("The office Location for user ""+parts[1]+"' has been changed From "+parts1[10] +" TO " +
parts[10]+"'/r/n"+" and moved to Helwan OU");
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
log.add("The office Location for user "+parts[1]+" has been changed to "+parts[10] +"'/r/n"+ " and moved to Helwan
OU ");
}
//////////Change Office Helwan and remove other employee
```

```
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Helwan Plant"))
{ModificationItem mods[] = new ModificationItem[1];
//Remove other employee groups
for (int a=0;a<gNotHelwan.length;a++) {if ( (Arrays.asList(Groups).contains(gNotHelwan[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gNotHelwan[a], mods);
System.out.println( "Group Removed: "+(gNotHelwan[a]));
log.add("Group "+gNotHelwan[a]+" Removed from user ""+parts[1]);}}
//add send internet mail groups
if(!Arrays.asList(Groups).contains("CN=SUZ-SendInternetMail,OU=Security
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ-SendInternetMail,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods);
log.add("Group 'SUZ-SendInternetMail' Added to user "+parts[1]);}
//Add headquarter employee groups
if (!Arrays.asList(Groups).contains("CN=SUZ - Helwan Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Helwan Employees,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Helwan Employees' Added to user "+parts[1]);}
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group Employee Removed from the use "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("Group Removed from the use "+parts[1]);
//Send message
Transport.send(message1);
// System.out.println("Sent message successfully...."):
}
```

```
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Helwan Plant"))
{ModificationItem mods[] = new ModificationItem[1];
if (Arrays.asList(Groups).contains("CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Kattameya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Menya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Bags Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||parts[7].equals("MAN")) {
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a])); }}
mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Helwan Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Helwan Managers' Added to user "+parts[1]);
MimeMessage message1 = new MimeMessage(session);
System.out.println( "CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: "'+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
```

```
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
}}
if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Helwan Plant") &&
parts[7].equals("MAN")) {ModificationItem mods[] = new ModificationItem[1];
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed: "+(gManagers[a]));}}
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
log.add("Group 'SUZ - Helwan Managers' Added to user "+parts[1]);
MimeMessage message1 = new MimeMessage(session);
System.out.println( "CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: ""+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
System.out.println("Sent message successfully....");
}
```

```
//////////////Change Office
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Tourah Plant"))
{ModificationItem mods[] = new ModificationItem[4];
mods[0]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new
BasicAttribute("physicalDeliveryOfficeName", "EGY/Cairo-Tourah/Corniche El-Nil, Helwan Road"));
mods[1]= new ModificationItem(DirContext.REPLACE_ATTRIBUTE, new BasicAttribute("postOfficeBox", "269"));
mods[2]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("1", "Cairo"));
mods[3]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("streetAddress", "Corniche
El Nile, Helwan Road, Tourah\r\n" +
"P.O. Box 269\r\n" +
"\r\n" +
"Cairo - Egypt"));
//update the group
ctx.modifyAttributes(userName,mods);
String [] userHQ= userName.split(",");
String moveToHqOU=userHQ[0]+ ",ou=Users,ou=Assets,ou=TOURAH,ou=EGYPT,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToHqOU);
//ctx.close():
System.out.println( test.substring(19));
System.out.println( parts1[10]+" has changed to "+parts[10]);
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("The office Location for the user "+parts[1]+" has been changed");
//Now set the actual message
message1.setText("The office Location for user ""+parts[1]+"" has been changed FROM "+parts1[10]+ " TO "+
parts[10]+ "'/r/n "+" and moved to TOURAH OU ");
//Send message
Transport.send(message1);
```

```
//System.out.println("Sent message successfully....");
log.add("The office Location for user "+parts[1]+" has been changed from "+parts1[10]+" to "+parts[10] + "'/r/n
"+" and moved to TOURAH OU ");
/////////
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Tourah Plant") )
{ModificationItem mods[] = new ModificationItem[1];
//Remove other employee groups
for (int a=0;a<gNotTourah.length;a++) {if ( (Arrays.asList(Groups).contains(gNotTourah[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gNotTourah[a], mods);
System.out.println( "Group Removed: "+(gNotTourah[a]));
log.add("Group "+gNotTourah[a]+" Removed from user ""+parts[1]);}}
//add send internet mail groups
if(!Arrays.asList(Groups).contains("CN=SUZ-SendInternetMail,OU=Security
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ-SendInternetMail,OU=Security Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net",
mods):
log.add("Group 'SUZ-SendInternetMail' Added to user "+parts[1]);}
//Add Tourah employee groups
if (!Arrays.asList(Groups).contains("CN=SUZ - Tourah Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net"))
{mods[0] = new ModificationItem(DirContext.ADD ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Tourah Employees,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
log.add("Group 'SUZ - Tourah Employees' Added to user "+parts[1]);}
MimeMessage message1 = new MimeMessage(session);
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
```

```
message1.setSubject("Group Removed from the use ""+parts[1]+"' has been changed");
//Now set the actual message
message1.setText("Group Removed from the use "+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
}
if (!parts1[10].equals(parts[10])&& parts1[0].equals(parts[0]) && parts[10].equals ("Tourah Plant") )
{ModificationItem mods[] = new ModificationItem[1];
if (Arrays.asList(Groups).contains("CN=SUZ - Headquarter Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Kattameya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Helwan Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Menya Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Bags Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Suez Managers,OU=Distribution
Groups.OU=GROUPS.DC=suz.DC=itcgr.DC=net")
||Arrays.asList(Groups).contains("CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net")
||parts[7].equals("MAN")) {
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed First: "+(gManagers[a]));}}
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Tourah Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
log.add("Group 'SUZ - Tourah Managers' Added to user "+parts[1]);
MimeMessage message1 = new MimeMessage(session);
System.out.println( "Group Manager Added First :CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
```

```
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: "+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
// System.out.println("Sent message successfully....");
}}
if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Tourah Plant")&&
parts[7].equals("MAN") ) {ModificationItem mods[] = new ModificationItem[1];
System.out.println( test.substring(19));
for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
{mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes(gManagers[a], mods);
System.out.println( "Group Manager Removed First: "+(gManagers[a])); } }
mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
ctx.modifyAttributes("CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net", mods);
log.add("Group 'SUZ - Tourah Managers' Added to user "+parts[1]);
MimeMessage message1 = new MimeMessage(session);
System.out.println( "Group Manager Added First :CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
```

```
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("Group manager added to user: "'+parts[1]);
//Now set the actual message
message1.setText("Group manager Added to: ""+parts[1]);
//Send message
Transport.send(message1);
// System.out.println("Sent message successfully....");
}
////////////
//////////
//////////Change Office to Tourah and promote to group manager
/////////
//if (!parts1[7].equals(parts[7])&& parts1[0].equals(parts[0]) && parts[10].equals ("Tourah Plant") &&
parts[7].equals("MAN") ) {ModificationItem mods[] = new ModificationItem[1];
//System.out.println( test.substring(19));
//for (int a=0;a<gManagers.length;a++) {if ( (Arrays.asList(Groups).contains(gManagers[a])))
//{mods[0] = new ModificationItem(DirContext.REMOVE ATTRIBUTE, new BasicAttribute("member", userName));
//ctx.modifyAttributes(gManagers[a], mods);
//System.out.println( "Group Manager Removed: "+(gManagers[a]));}}
//mods[0] = new ModificationItem(DirContext.ADD_ATTRIBUTE, new BasicAttribute("member", userName));
//ctx.modifyAttributes("CN=SUZ - Tourah Managers,OU=Distribution
Groups, OU=GROUPS, DC=suz, DC=itcgr, DC=net", mods);
//MimeMessage message1 = new MimeMessage(session);
//System.out.println( "Group Manager Added: CN=SUZ - Tourah Managers,OU=Distribution
Groups,OU=GROUPS,DC=suz,DC=itcgr,DC=net");
//Set From: header field of the header.
//message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
```

```
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
//message1.setSubject("Group manager added to user: "" +parts[1]);
//Now set the actual message
//message1.setText("Group manager Added to: ""+parts[1]);
//Send message
//Transport.send(message1);
//System.out.println("Sent message successfully....");
//}
if (!parts1[11].equals(parts[11])&& parts1[0].equals(parts[0]) && parts[11].equals ("T") ) {ModificationItem mods[]
= new ModificationItem[4];
int UF_ACCOUNT_DISABLE = 0x0002;
mods[0] = new ModificationItem(DirContext.REPLACE ATTRIBUTE, new
BasicAttribute("userAccountControl",Integer.toString(UF_ACCOUNT_DISABLE)));
mods[1]= new ModificationItem(DirContext.REPLACE ATTRIBUTE, new BasicAttribute("description", "Disabled
by ADBulk Program"));
mods[2] = new ModificationItem(DirContext.REPLACE ATTRIBUTE, new
BasicAttribute("msExchHideFromAddressLists", "TRUE"));
mods[3] = new ModificationItem(DirContext.REPLACE ATTRIBUTE,new BasicAttribute("mail"));
ctx.modifyAttributes(userName, mods);
//Move user account
String [] userD= userName.split(",");
String moveToDisabledOU=userD[0]+ ",ou=Users,ou=Disabled Accounts,DC=suz,DC=itcgr,DC=net";
ctx.rename(userName,moveToDisabledOU);
for (int a=0;a<Groups.length;a++)
{
    String [] GroupD= Groups[a].split(",");
    for (int b=0;b<GroupD.length;b++) {
    System.out.println( "Group Elements : "+(GroupD[b]));}
if(Arrays.asList(GroupD).contains("DC=suz")) {
    mods[0] = new ModificationItem(DirContext.REMOVE_ATTRIBUTE, new BasicAttribute("member",
userName)):
ctx.modifyAttributes(Groups[a], mods);
System.out.println( "Group Removed : "+(Groups[a])); }}
log.add("User has been disabled:"+parts[1]);
MimeMessage message1 = new MimeMessage(session);
```

```
message1.setFrom(new InternetAddress(from));
//Set To: header field of the header.
message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
//message1.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
//Set Subject: header field
message1.setSubject("User has been disabled: "'+parts[1]);
//Now set the actual message
message1.setText("User has been disabled: ""+parts[1]);
//Send message
Transport.send(message1);
//System.out.println("Sent message successfully....");
}
                   }}}//the new program
         String [] logFile = log.toArray(new String[0]);
                   for (int a=0;a<logFile.length;a++) {System.out.println("this fo log: "+logFile[a]);}
                   BufferedWriter logfilein =
                            new BufferedWriter (new FileWriter
("//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/DifferentADBulk/ADBulkLogFile"+sdf.format(c1.getTim
e())+".txt"));
                   for (String line : logFile ){
                        logfilein.write(line);
                        logfilein.newLine();
                        }logfilein.close ();
                        try {
                            if (logFile.length == 0) {
                        // Create a default MimeMessage object.
                        // Set From: header field of the header.
                        message.setFrom(new InternetAddress(from));
                        // Set To: header field of the header.
                        message.setRecipients(Message.RecipientType.TO,
                          InternetAddress.parse(to));
                   //message.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
```

```
// message.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
                   // message.addRecipient(Message.RecipientType.BCC, new InternetAddress(to4));
                        // Set Subject: header field
                        message.setSubject("Check AD changes for today");
                        // Create the message part
                        BodyPart messageBodyPart = new MimeBodyPart();
                        // Now set the actual message
                        messageBodyPart.setText("Check Attached file for AD changes for today");
                        // Create a multipar message
                        Multipart multipart = new MimeMultipart();
                        // Set text message part
                        multipart.addBodyPart(messageBodyPart);
                        // Part two is attachment
                        messageBodyPart = new MimeBodyPart();
                        String filename =
"//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/DifferentADBulk/ADBulkLogFile"+sdf.format(c1.getTime
())+".txt";
                        DataSource source = new FileDataSource(filename);
                        messageBodyPart.setDataHandler(new DataHandler(source));
                        messageBodyPart.setFileName(filename);
                        multipart.addBodyPart(messageBodyPart);
                        // Send the complete message parts
                        message.setContent(multipart);
                        // Send message
                        Transport.send(message);
                            } } catch (MessagingException e) {
                        throw new RuntimeException(e);}
try {
if (logFile.length != 0) {
  // Create a default MimeMessage object.
  // Set From: header field of the header.
  message.setFrom(new InternetAddress(from));
  // Set To: header field of the header.
message.setRecipients(Message.RecipientType.TO,InternetAddress.parse(to));
message.addRecipient(Message.RecipientType.TO, new InternetAddress(to1));
message.addRecipient(Message.RecipientType.TO, new InternetAddress(to2));
message.addRecipient(Message.RecipientType.BCC, new InternetAddress(to4));
message.addRecipient(Message.RecipientType.TO, new InternetAddress(to5));
```

```
message.addRecipient(Message.RecipientType.TO, new InternetAddress(to3));
  // Set Subject: header field
  message.setSubject("Check AD changes for today");
  // Create the message part
  BodyPart messageBodyPart = new MimeBodyPart();
  // Now set the actual message
  messageBodyPart.setText("Check Attached file for AD changes for today");
  // Create a multipar message
  Multipart multipart = new MimeMultipart();
  // Set text message part
  multipart.addBodyPart(messageBodyPart);
  // Part two is attachment
  messageBodyPart = new MimeBodyPart();
  String filename =
"//10.26.1.50/Share/Departments/HeadOffice/IT/ADSBuLK/DifferentADBulk/ADBulkLogFile"+sdf.format(c1.getTime
())+".txt";
  DataSource source = new FileDataSource(filename);
  messageBodyPart.setDataHandler(new DataHandler(source));
  messageBodyPart.setFileName(filename);
  multipart.addBodyPart(messageBodyPart);
  // Send the complete message parts
  message.setContent(multipart);
  // Send message
  Transport.send(message);
  System.out.println("array is not empty");
 } //End of LOG Email
} catch (MessagingException e) {
  throw new RuntimeException(e);}
```

}