```
//
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//
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package local_project.etl_project_process_0_1;
import routines. Numeric;
import routines.DataOperation;
import routines. Talend Data Generator;
import routines. Talend String Util;
import routines. Talend String;
import routines. String Handling;
import routines. Relational;
import routines. Talend Date;
import routines. Mathematical;
import routines.system.*;
import routines.system.api.*;
import java.text.ParseException;
import java.text.SimpleDateFormat;
```

```
import java.util.Date;
import java.util.List;
import java.math.BigDecimal;
import java.io.ByteArrayOutputStream;
import java.io.ByteArrayInputStream;
import java.io.DataInputStream;
import java.io.DataOutputStream;
import java.io.ObjectOutputStream;
import java.io.ObjectInputStream;
import java.io.IOException;
import java.util.Comparator;
@SuppressWarnings("unused")
/**
* Job: etl_project_process Purpose: <br>
* Description: <br>
* @author user@talend.com
* @version 8.0.1.20211109_1610
* @status
*/
public class etl_project_process implements TalendJob {
        protected static void logIgnoredError(String message, Throwable cause) {
               System.err.println(message);
               if (cause != null) {
                       cause.printStackTrace();
               }
        }
```

```
public final Object obj = new Object();
// for transmiting parameters purpose
private Object valueObject = null;
public Object getValueObject() {
        return this.valueObject;
}
public void setValueObject(Object valueObject) {
        this.valueObject = valueObject;
}
private final static String defaultCharset = java.nio.charset.Charset.defaultCharset().name();
private final static String utf8Charset = "UTF-8";
// contains type for every context property
public class PropertiesWithType extends java.util.Properties {
        private static final long serialVersionUID = 1L;
        private java.util.Map<String, String> propertyTypes = new java.util.HashMap<>();
        public PropertiesWithType(java.util.Properties properties) {
                super(properties);
        }
        public PropertiesWithType() {
                super();
        }
```

```
public void setContextType(String key, String type) {
                propertyTypes.put(key, type);
        }
        public String getContextType(String key) {
                return propertyTypes.get(key);
        }
}
// create and load default properties
private java.util.Properties defaultProps = new java.util.Properties();
// create application properties with default
public class ContextProperties extends PropertiesWithType {
        private static final long serialVersionUID = 1L;
        public ContextProperties(java.util.Properties properties) {
                super(properties);
        }
        public ContextProperties() {
                super();
        }
        public void synchronizeContext() {
        }
        // if the stored or passed value is "<TALEND_NULL>" string, it mean null
        public String getStringValue(String key) {
```

```
String origin_value = this.getProperty(key);
                        if
(NULL_VALUE_EXPRESSION_IN_COMMAND_STRING_FOR_CHILD_JOB_ONLY.equals(origin_value)) {
                                return null;
                        }
                        return origin_value;
                }
        }
        protected ContextProperties context = new ContextProperties(); // will be instanciated by
MS.
        public ContextProperties getContext() {
                return this.context;
        }
        private final String jobVersion = "0.1";
        private final String jobName = "etl_project_process";
        private final String projectName = "LOCAL_PROJECT";
        public Integer errorCode = null;
        private String currentComponent = "";
        private final java.util.Map<String, Object> globalMap = new java.util.HashMap<String,
Object>();
        private final static java.util.Map<String, Object> junitGlobalMap = new
java.util.HashMap<String, Object>();
        private final java.util.Map<String, Long> start_Hash = new java.util.HashMap<String, Long>();
        private final java.util.Map<String, Long> end_Hash = new java.util.HashMap<String, Long>();
        private final java.util.Map<String, Boolean> ok_Hash = new java.util.HashMap<String,
Boolean>();
        public final java.util.List<String[]> globalBuffer = new java.util.ArrayList<String[]>();
```

```
private final static String KEY_DB_DATASOURCES = "KEY_DB_DATASOURCES";
        private final static String KEY_DB_DATASOURCES_RAW = "KEY_DB_DATASOURCES_RAW";
        public void setDataSources(java.util.Map<String, javax.sql.DataSource> dataSources) {
               java.util.Map<String, routines.system.TalendDataSource> talendDataSources = new
java.util.HashMap<String, routines.system.TalendDataSource>();
               for (java.util.Map.Entry<String, javax.sql.DataSource> dataSourceEntry:
dataSources.entrySet()) {
                       talendDataSources.put(dataSourceEntry.getKey(),
                                      new
routines.system.TalendDataSource(dataSourceEntry.getValue()));
               }
               globalMap.put(KEY_DB_DATASOURCES, talendDataSources);
               globalMap.put(KEY_DB_DATASOURCES_RAW, new java.util.HashMap<String,
javax.sql.DataSource>(dataSources));
       }
        public void setDataSourceReferences(List serviceReferences) throws Exception {
               java.util.Map<String, routines.system.TalendDataSource> talendDataSources = new
java.util.HashMap<String, routines.system.TalendDataSource>();
               java.util.Map<String, javax.sql.DataSource> dataSources = new
java.util.HashMap<String, javax.sql.DataSource>();
               for (java.util.Map.Entry<String, javax.sql.DataSource> entry: BundleUtils
                               .getServices(serviceReferences,
javax.sql.DataSource.class).entrySet()) {
                       dataSources.put(entry.getKey(), entry.getValue());
                       talendDataSources.put(entry.getKey(), new
routines.system.TalendDataSource(entry.getValue()));
               }
```

// OSGi DataSource

```
globalMap.put(KEY_DB_DATASOURCES, talendDataSources);
                globalMap.put(KEY_DB_DATASOURCES_RAW, new java.util.HashMap<String,
javax.sql.DataSource>(dataSources));
        }
        private final java.io.ByteArrayOutputStream baos = new java.io.ByteArrayOutputStream();
        private final java.io.PrintStream errorMessagePS = new java.io.PrintStream(new
java.io.BufferedOutputStream(baos));
        public String getExceptionStackTrace() {
                if ("failure".equals(this.getStatus())) {
                        errorMessagePS.flush();
                        return baos.toString();
                }
                return null;
        }
        private Exception exception;
        public Exception getException() {
                if ("failure".equals(this.getStatus())) {
                        return this.exception;
                }
                return null;
        }
        private class TalendException extends Exception {
                private static final long serialVersionUID = 1L;
                private java.util.Map<String, Object> globalMap = null;
```

```
private Exception e = null;
                private String currentComponent = null;
                private String virtualComponentName = null;
                public void setVirtualComponentName(String virtualComponentName) {
                       this.virtualComponentName = virtualComponentName;
                }
                private TalendException(Exception e, String errorComponent, final
java.util.Map<String, Object> globalMap) {
                       this.currentComponent = errorComponent;
                       this.globalMap = globalMap;
                       this.e = e;
               }
               public Exception getException() {
                       return this.e;
               }
               public String getCurrentComponent() {
                       return this.currentComponent;
               }
               public String getExceptionCauseMessage(Exception e) {
                       Throwable cause = e;
                       String message = null;
                       int i = 10;
                       while (null != cause && 0 < i--) {
                               message = cause.getMessage();
                               if (null == message) {
                                       cause = cause.getCause();
```

```
} else {
                                       break;
                               }
                       }
                       if (null == message) {
                               message = e.getClass().getName();
                       }
                       return message;
               }
                @Override
                public void printStackTrace() {
                       if (!(e instanceof TalendException | | e instanceof TDieException)) {
                               if (virtualComponentName != null &&
currentComponent.indexOf(virtualComponentName + "_") == 0) {
                                       globalMap.put(virtualComponentName +
"_ERROR_MESSAGE", getExceptionCauseMessage(e));
                               }
                               globalMap.put(currentComponent + "_ERROR_MESSAGE",
getExceptionCauseMessage(e));
                               System.err.println("Exception in component " + currentComponent +
" (" + jobName + ")");
                       }
                       if (!(e instanceof TDieException)) {
                               if (e instanceof TalendException) {
                                       e.printStackTrace();
                               } else {
                                       e.printStackTrace();
                                       e.printStackTrace(errorMessagePS);
                                       etl_project_process.this.exception = e;
                               }
                       }
```

```
if (!(e instanceof TalendException)) {
                                try {
                                        for (java.lang.reflect.Method m:
this.getClass().getEnclosingClass().getMethods()) {
                                                if (m.getName().compareTo(currentComponent +
"_error") == 0) {
                                                        m.invoke(etl_project_process.this, new
Object[] { e, currentComponent, globalMap });
                                                        break;
                                                }
                                        }
                                        if (!(e instanceof TDieException)) {
                                        }
                                } catch (Exception e) {
                                        this.e.printStackTrace();
                                }
                        }
                }
        }
        public void tFileInputDelimited_1_error(Exception exception, String errorComponent,
                        final java.util.Map<String, Object> globalMap) throws TalendException {
                end_Hash.put(errorComponent, System.currentTimeMillis());
                status = "failure";
                tFileInputDelimited_1_onSubJobError(exception, errorComponent, globalMap);
        }
```

```
public void tMap_1_error(Exception exception, String errorComponent, final
java.util.Map<String, Object> globalMap)
                       throws TalendException {
               end Hash.put(errorComponent, System.currentTimeMillis());
               status = "failure";
               tFileInputDelimited_1_onSubJobError(exception, errorComponent, globalMap);
       }
       public void tFileOutputDelimited_1_error(Exception exception, String errorComponent,
                       final java.util.Map<String, Object> globalMap) throws TalendException {
               end_Hash.put(errorComponent, System.currentTimeMillis());
               status = "failure";
               tFileInputDelimited_1_onSubJobError(exception, errorComponent, globalMap);
       }
       public void tLogRow_2_error(Exception exception, String errorComponent,
                       final java.util.Map<String, Object> globalMap) throws TalendException {
               end_Hash.put(errorComponent, System.currentTimeMillis());
               status = "failure";
               tFileInputDelimited_1_onSubJobError(exception, errorComponent, globalMap);
       }
```

```
public void tFileInputJSON 1 error(Exception exception, String errorComponent,
               final java.util.Map<String, Object> globalMap) throws TalendException {
       end_Hash.put(errorComponent, System.currentTimeMillis());
       status = "failure";
       tFileInputJSON 1 onSubJobError(exception, errorComponent, globalMap);
}
public void tLogRow 1 error(Exception exception, String errorComponent,
               final java.util.Map<String, Object> globalMap) throws TalendException {
       end_Hash.put(errorComponent, System.currentTimeMillis());
       status = "failure";
       tFileInputJSON_1_onSubJobError(exception, errorComponent, globalMap);
}
public void tFileOutputExcel_1_error(Exception exception, String errorComponent,
               final java.util.Map<String, Object> globalMap) throws TalendException {
       end_Hash.put(errorComponent, System.currentTimeMillis());
       status = "failure";
       tFileInputJSON_1_onSubJobError(exception, errorComponent, globalMap);
}
public void tAdvancedHash_row4_error(Exception exception, String errorComponent,
```

```
final java.util.Map<String, Object> globalMap) throws TalendException {
               end_Hash.put(errorComponent, System.currentTimeMillis());
               status = "failure";
               tFileInputJSON_1_onSubJobError(exception, errorComponent, globalMap);
       }
        public void tFileInputDelimited 1 onSubJobError(Exception exception, String
errorComponent,
                       final java.util.Map<String, Object> globalMap) throws TalendException {
               resumeUtil.addLog("SYSTEM_LOG", "NODE:" + errorComponent, "",
Thread.currentThread().getId() + "", "FATAL", "",
                               exception.getMessage(),
ResumeUtil.getExceptionStackTrace(exception), "");
       }
       public void tFileInputJSON_1_onSubJobError(Exception exception, String errorComponent,
                       final java.util.Map<String, Object> globalMap) throws TalendException {
               resumeUtil.addLog("SYSTEM_LOG", "NODE:" + errorComponent, "",
Thread.currentThread().getId() + "", "FATAL", "",
                               exception.getMessage(),
ResumeUtil.getExceptionStackTrace(exception), "");
       }
        public static class output_salStruct implements
routines.system.IPersistableRow<output_salStruct> {
               final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
```

```
static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
protected static final int DEFAULT_HASHCODE = 1;
protected static final int PRIME = 31;
protected int hashCode = DEFAULT_HASHCODE;
public boolean hashCodeDirty = true;
public String loopKey;
public Integer work_year;
public Integer getWork_year() {
       return this.work_year;
}
public String experience_level;
public String getExperience_level() {
       return this.experience_level;
}
public String employment_type;
public String getEmployment_type() {
       return this.employment_type;
}
public String job_title;
public String getJob_title() {
       return this.job_title;
}
```

```
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
public Character company_size;
public Character getCompany_size() {
        return this.company_size;
}
```

```
@Override
                 public int hashCode() {
                         if (this.hashCodeDirty) {
                                 final int prime = PRIME;
                                 int result = DEFAULT_HASHCODE;
                                 result = prime * result + ((this.work_year == null) ? 0 :
this.work_year.hashCode());
                                 this.hashCode = result;
                                 this.hashCodeDirty = false;
                         }
                         return this.hashCode;
                }
                 @Override
                public boolean equals(Object obj) {
                         if (this == obj)
                                 return true;
                         if (obj == null)
                                 return false;
                         if (getClass() != obj.getClass())
                                 return false;
                         final output_salStruct other = (output_salStruct) obj;
                         if (this.work_year == null) {
                                 if (other.work_year != null)
                                         return false;
                         } else if (!this.work_year.equals(other.work_year))
```

```
return false;
       return true;
}
public void copyDataTo(output_salStruct other) {
       other.work_year = this.work_year;
       other.experience_level = this.experience_level;
       other.employment_type = this.employment_type;
       other.job_title = this.job_title;
       other.salary_in_usd = this.salary_in_usd;
       other.employee_residence = this.employee_residence;
       other.remote_ratio = this.remote_ratio;
       other.company_location = this.company_location;
       other.company_size = this.company_size;
}
public void copyKeysDataTo(output_salStruct other) {
       other.work_year = this.work_year;
}
private Integer readInteger(ObjectInputStream dis) throws IOException {
       Integer intReturn;
       int length = 0;
       length = dis.readByte();
```

if (length == -1) {

intReturn = null;

```
} else {
                                intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                        Integer intReturn;
                        int length = 0;
                        length = dis.readByte();
                        if (length == -1) {
                                 intReturn = null;
                        } else {
                                 intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                        if (intNum == null) {
                                 dos.writeByte(-1);
                        } else {
                                 dos.writeByte(0);
                                 dos.writeInt(intNum);
                        }
                }
                private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                        if (intNum == null) {
```

```
marshaller.writeByte(-1);
                       } else {
                               marshaller.writeByte(0);
                               marshaller.writeInt(intNum);
                       }
               }
               private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
       dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
```

```
private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
               private void writeString(String str, ObjectOutputStream dos) throws IOException {
                       if (str == null) {
                               dos.writeInt(-1);
                       } else {
                               byte[] byteArray = str.getBytes(utf8Charset);
                               dos.writeInt(byteArray.length);
                               dos.write(byteArray);
```

```
}
                }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
                        if (str == null) {
                                marshaller.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                marshaller.writeInt(byteArray.length);
                                marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
                                         this.experience_level = readString(dis);
                                         this.employment_type = readString(dis);
                                         this.job_title = readString(dis);
                                         this.salary_in_usd = readInteger(dis);
```

```
this.remote_ratio = readInteger(dis);
                                         this.company_location = readString(dis);
                                         length = dis.readByte();
                                         if (length == -1) {
                                                 this.company_size = null;
                                         } else {
                                                 this.company_size = dis.readChar();
                                         }
                                } catch (IOException e) {
                                         throw new RuntimeException(e);
                                }
                        }
                }
                public void readData(org.jboss.marshalling.Unmarshaller dis) {
                        synchronized \ (common Byte Array Lock\_LOCAL\_PROJECT\_etl\_project\_process)
{
                                try {
                                         int length = 0;
```

this.employee_residence = readString(dis);

```
this.work_year = readInteger(dis);
        this.experience_level = readString(dis);
        this.employment_type = readString(dis);
        this.job_title = readString(dis);
        this.salary_in_usd = readInteger(dis);
        this.employee_residence = readString(dis);
        this.remote_ratio = readInteger(dis);
        this.company_location = readString(dis);
        length = dis.readByte();
        if (length == -1) {
                this.company_size = null;
        } else {
                this.company_size = dis.readChar();
        }
} catch (IOException e) {
        throw new RuntimeException(e);
}
```

}

```
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary_in_usd, dos);
                // String
                writeString(this.employee_residence, dos);
```

// Integer

```
// String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public void writeData(org.jboss.marshalling.Marshaller dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
```

writeInteger(this.remote_ratio, dos);

```
// String
writeString(this.employment_type, dos);
// String
writeString(this.job_title, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
writeString(this.employee_residence, dos);
// Integer
writeInteger(this.remote_ratio, dos);
// String
writeString(this.company_location, dos);
// Character
if (this.company_size == null) {
        dos.writeByte(-1);
} else {
        dos.writeByte(0);
```

```
dos.writeChar(this.company_size);
               }
        } catch (IOException e) {
               throw new RuntimeException(e);
        }
}
public String toString() {
        StringBuilder sb = new StringBuilder();
        sb.append(super.toString());
        sb.append("[");
        sb.append("work_year=" + String.valueOf(work_year));
        sb.append(",experience_level=" + experience_level);
        sb.append(",employment_type=" + employment_type);
        sb.append(",job_title=" + job_title);
        sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
        sb.append(",employee_residence=" + employee_residence);
        sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
        sb.append(",company_location=" + company_location);
        sb.append(",company_size=" + String.valueOf(company_size));
        sb.append("]");
        return sb.toString();
}
/**
* Compare keys
*/
```

```
public int compareTo(output_salStruct other) {
        int returnValue = -1;
        returnValue = checkNullsAndCompare(this.work_year, other.work_year);
        if (returnValue != 0) {
                return return Value;
        }
        return return Value;
}
private int checkNullsAndCompare(Object object1, Object object2) {
        int returnValue = 0;
        if (object1 instanceof Comparable && object2 instanceof Comparable) {
                returnValue = ((Comparable) object1).compareTo(object2);
        } else if (object1 != null && object2 != null) {
                returnValue = compareStrings(object1.toString(), object2.toString());
        } else if (object1 == null && object2 != null) {
                returnValue = 1;
        } else if (object1 != null && object2 == null) {
                returnValue = -1;
        } else {
                returnValue = 0;
        }
        return returnValue;
}
private int compareStrings(String string1, String string2) {
        return string1.compareTo(string2);
```

```
}
       }
       public static class rejectedStruct implements
routines.system.IPersistableRow<rejectedStruct> {
               final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
               static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
               protected static final int DEFAULT_HASHCODE = 1;
               protected static final int PRIME = 31;
               protected int hashCode = DEFAULT_HASHCODE;
               public boolean hashCodeDirty = true;
               public String loopKey;
               public Integer work_year;
               public Integer getWork_year() {
                       return this.work_year;
               }
               public String experience_level;
               public String getExperience_level() {
                       return this.experience_level;
               }
               public String employment_type;
               public String getEmployment_type() {
                       return this.employment_type;
```

```
}
public String job_title;
public String getJob_title() {
        return this.job_title;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
```

```
public Character company_size;
                public Character getCompany_size() {
                        return this.company_size;
                }
                @Override
                public int hashCode() {
                        if (this.hashCodeDirty) {
                                 final int prime = PRIME;
                                 int result = DEFAULT_HASHCODE;
                                 result = prime * result + ((this.work_year == null) ? 0 :
this.work_year.hashCode());
                                 this.hashCode = result;
                                 this.hashCodeDirty = false;
                        }
                        return this.hashCode;
                }
                @Override
                public boolean equals(Object obj) {
                        if (this == obj)
                                 return true;
                        if (obj == null)
                                 return false;
                        if (getClass() != obj.getClass())
                                 return false;
                        final rejectedStruct other = (rejectedStruct) obj;
```

```
if (this.work_year == null) {
                if (other.work_year != null)
                        return false;
        } else if (!this.work_year.equals(other.work_year))
                return false;
        return true;
}
public void copyDataTo(rejectedStruct other) {
        other.work_year = this.work_year;
        other.experience_level = this.experience_level;
        other.employment_type = this.employment_type;
        other.job_title = this.job_title;
        other.salary_in_usd = this.salary_in_usd;
        other.employee_residence = this.employee_residence;
        other.remote_ratio = this.remote_ratio;
        other.company_location = this.company_location;
        other.company_size = this.company_size;
}
public void copyKeysDataTo(rejectedStruct other) {
        other.work_year = this.work_year;
}
```

```
Integer intReturn;
                         int length = 0;
                         length = dis.readByte();
                         if (length == -1) {
                                 intReturn = null;
                         } else {
                                 intReturn = dis.readInt();
                         }
                         return intReturn;
                }
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                         Integer intReturn;
                         int length = 0;
                         length = dis.readByte();
                         if (length == -1) {
                                 intReturn = null;
                        } else {
                                 intReturn = dis.readInt();
                        }
                         return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                         if (intNum == null) {
                                 dos.writeByte(-1);
                         } else {
                                 dos.writeByte(0);
```

private Integer readInteger(ObjectInputStream dis) throws IOException {

```
dos.writeInt(intNum);
                       }
               }
               private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                       if (intNum == null) {
                               marshaller.writeByte(-1);
                       } else {
                               marshaller.writeByte(0);
                               marshaller.writeInt(intNum);
                       }
               }
               private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
```

```
dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String (common Byte Array\_LOCAL\_PROJECT\_etl\_project\_process, 0, length, utf8 Charset);
                       return strReturn;
               }
               private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
       unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
```

```
private void writeString(String str, ObjectOutputStream dos) throws IOException {
                        if (str == null) {
                                dos.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                 dos.writeInt(byteArray.length);
                                dos.write(byteArray);
                        }
                }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
                        if (str == null) {
                                marshaller.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                marshaller.writeInt(byteArray.length);
                                marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
```

```
this.employment_type = readString(dis);
                this.job_title = readString(dis);
                this.salary_in_usd = readInteger(dis);
                this.employee_residence = readString(dis);
                this.remote_ratio = readInteger(dis);
                this.company_location = readString(dis);
                length = dis.readByte();
                if (length == -1) {
                        this.company_size = null;
                } else {
                        this.company_size = dis.readChar();
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
```

this.experience_level = readString(dis);

```
public void readData(org.jboss.marshalling.Unmarshaller dis) {
       synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
               try {
                        int length = 0;
                        this.work_year = readInteger(dis);
                        this.experience_level = readString(dis);
                        this.employment_type = readString(dis);
                        this.job_title = readString(dis);
                        this.salary_in_usd = readInteger(dis);
                        this.employee_residence = readString(dis);
                        this.remote_ratio = readInteger(dis);
                        this.company_location = readString(dis);
                        length = dis.readByte();
                        if (length == -1) {
                                this.company_size = null;
                        } else {
                                this.company_size = dis.readChar();
```

{

```
} catch (IOException e) {
                        throw new RuntimeException(e);
                }
       }
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
```

```
// String
                writeString(this.employee_residence, dos);
                // Integer
                writeInteger(this.remote_ratio, dos);
                // String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public void writeData(org.jboss.marshalling.Marshaller dos) {
        try {
```

writeInteger(this.salary_in_usd, dos);

```
// Integer
writeInteger(this.work_year, dos);
// String
writeString(this.experience_level, dos);
// String
writeString(this.employment_type, dos);
// String
writeString(this.job_title, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
writeString(this.employee_residence, dos);
// Integer
writeInteger(this.remote_ratio, dos);
// String
```

```
writeString(this.company_location, dos);
               // Character
               if (this.company_size == null) {
                       dos.writeByte(-1);
               } else {
                       dos.writeByte(0);
                       dos.writeChar(this.company size);
               }
       } catch (IOException e) {
               throw new RuntimeException(e);
       }
}
public String toString() {
       StringBuilder sb = new StringBuilder();
       sb.append(super.toString());
       sb.append("[");
       sb.append("work_year=" + String.valueOf(work_year));
       sb.append(",experience_level=" + experience_level);
       sb.append(",employment_type=" + employment_type);
       sb.append(",job_title=" + job_title);
       sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
       sb.append(",employee_residence=" + employee_residence);
        sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
       sb.append(",company_location=" + company_location);
        sb.append(",company_size=" + String.valueOf(company_size));
```

```
sb.append("]");
        return sb.toString();
}
* Compare keys
*/
public int compareTo(rejectedStruct other) {
        int returnValue = -1;
        returnValue = checkNullsAndCompare(this.work_year, other.work_year);
        if (returnValue != 0) {
                return returnValue;
        }
        return return Value;
}
private int checkNullsAndCompare(Object object1, Object object2) {
        int returnValue = 0;
        if (object1 instanceof Comparable && object2 instanceof Comparable) {
                returnValue = ((Comparable) object1).compareTo(object2);
        } else if (object1 != null && object2 != null) {
                returnValue = compareStrings(object1.toString(), object2.toString());
        } else if (object1 == null && object2 != null) {
                returnValue = 1;
        } else if (object1 != null && object2 == null) {
                returnValue = -1;
        } else {
```

```
returnValue = 0;
                       }
                       return returnValue;
               }
                private int compareStrings(String string1, String string2) {
                       return string1.compareTo(string2);
                }
       }
        public static class row3Struct implements routines.system.IPersistableRow<row3Struct> {
               final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
               static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
                public Integer work_year;
                public Integer getWork_year() {
                       return this.work_year;
               }
                public String experience_level;
                public String getExperience_level() {
                       return this.experience_level;
                }
                public String employment_type;
```

```
public String getEmployment_type() {
        return this.employment_type;
}
public String job_title;
public String getJob_title() {
        return this.job_title;
}
public Integer salary;
public Integer getSalary() {
        return this.salary;
}
public String salary_currency;
public String getSalary_currency() {
        return this.salary_currency;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
```

```
return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
public Character company_size;
public Character getCompany_size() {
        return this.company_size;
}
private Integer readInteger(ObjectInputStream dis) throws IOException {
        Integer intReturn;
        int length = 0;
        length = dis.readByte();
        if (length == -1) {
                intReturn = null;
        } else {
                intReturn = dis.readInt();
        }
        return intReturn;
```

```
}
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                        Integer intReturn;
                        int length = 0;
                        length = dis.readByte();
                        if (length == -1) {
                                 intReturn = null;
                        } else {
                                 intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                        if (intNum == null) {
                                 dos.writeByte(-1);
                        } else {
                                 dos.writeByte(0);
                                 dos.writeInt(intNum);
                        }
                }
                private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                        if (intNum == null) {
                                 marshaller.writeByte(-1);
                        } else {
```

marshaller.writeByte(0);

marshaller.writeInt(intNum);

```
}
               }
               private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
               private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
```

```
if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String (common Byte Array\_LOCAL\_PROJECT\_etl\_project\_process, 0, length, utf8 Charset);
                       }
                       return strReturn;
                }
                private void writeString(String str, ObjectOutputStream dos) throws IOException {
                       if (str == null) {
                               dos.writeInt(-1);
                       } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                dos.writeInt(byteArray.length);
                               dos.write(byteArray);
                       }
               }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
```

```
if (str == null) {
                                 marshaller.writeInt(-1);
                        } else {
                                 byte[] byteArray = str.getBytes(utf8Charset);
                                 marshaller.writeInt(byteArray.length);
                                 marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                 try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
                                         this.experience_level = readString(dis);
                                         this.employment_type = readString(dis);
                                         this.job_title = readString(dis);
                                         this.salary = readInteger(dis);
                                         this.salary_currency = readString(dis);
                                         this.salary_in_usd = readInteger(dis);
```

```
this.remote_ratio = readInteger(dis);
                                         this.company_location = readString(dis);
                                         length = dis.readByte();
                                         if (length == -1) {
                                                 this.company_size = null;
                                         } else {
                                                 this.company_size = dis.readChar();
                                         }
                                } catch (IOException e) {
                                         throw new RuntimeException(e);
                                }
                        }
                }
                public void readData(org.jboss.marshalling.Unmarshaller dis) {
                        synchronized \ (common Byte Array Lock\_LOCAL\_PROJECT\_etl\_project\_process)
{
                                try {
                                         int length = 0;
```

this.employee_residence = readString(dis);

```
this.work_year = readInteger(dis);
        this.experience_level = readString(dis);
        this.employment_type = readString(dis);
        this.job_title = readString(dis);
        this.salary = readInteger(dis);
        this.salary_currency = readString(dis);
        this.salary_in_usd = readInteger(dis);
        this.employee_residence = readString(dis);
        this.remote_ratio = readInteger(dis);
        this.company_location = readString(dis);
        length = dis.readByte();
        if (length == -1) {
                this.company_size = null;
        } else {
                this.company_size = dis.readChar();
        }
} catch (IOException e) {
        throw new RuntimeException(e);
```

```
}
        }
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary, dos);
                // String
```

```
writeString(this.salary_currency, dos);
        // Integer
        writeInteger(this.salary_in_usd, dos);
        // String
        writeString(this.employee_residence, dos);
        // Integer
        writeInteger(this.remote_ratio, dos);
        // String
        writeString(this.company_location, dos);
        // Character
        if (this.company_size == null) {
                dos.writeByte(-1);
        } else {
                dos.writeByte(0);
                dos.writeChar(this.company_size);
       }
} catch (IOException e) {
        throw new RuntimeException(e);
```

```
}
public\ void\ write Data (org. jboss. marshalling. Marshaller\ dos)\ \{
        try {
                 // Integer
                 writeInteger(this.work_year, dos);
                 // String
                 writeString(this.experience_level, dos);
                 // String
                 writeString(this.employment_type, dos);
                 // String
                 writeString(this.job_title, dos);
                 // Integer
                 writeInteger(this.salary, dos);
                 // String
                 writeString(this.salary_currency, dos);
```

// Integer

```
// String
                writeString(this.employee_residence, dos);
                // Integer
                writeInteger(this.remote_ratio, dos);
                // String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public String toString() {
```

writeInteger(this.salary_in_usd, dos);

```
StringBuilder sb = new StringBuilder();
       sb.append(super.toString());
       sb.append("[");
       sb.append("work_year=" + String.valueOf(work_year));
       sb.append(",experience_level=" + experience_level);
       sb.append(",employment_type=" + employment_type);
       sb.append(",job_title=" + job_title);
       sb.append(",salary=" + String.valueOf(salary));
       sb.append(",salary_currency=" + salary_currency);
       sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
       sb.append(",employee_residence=" + employee_residence);
       sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
       sb.append(",company_location=" + company_location);
       sb.append(",company_size=" + String.valueOf(company_size));
       sb.append("]");
       return sb.toString();
}
/**
* Compare keys
*/
public int compareTo(row3Struct other) {
       int returnValue = -1;
       return returnValue;
}
private int checkNullsAndCompare(Object object1, Object object2) {
       int returnValue = 0;
```

```
returnValue = ((Comparable) object1).compareTo(object2);
                        } else if (object1 != null && object2 != null) {
                                returnValue = compareStrings(object1.toString(), object2.toString());
                        } else if (object1 == null && object2 != null) {
                                returnValue = 1;
                        } else if (object1 != null && object2 == null) {
                                returnValue = -1;
                        } else {
                                returnValue = 0;
                        }
                        return return Value;
                }
                private int compareStrings(String string1, String string2) {
                        return string1.compareTo(string2);
                }
        }
        public static class after_tFileInputDelimited_1Struct
                        implements
routines.system.IPersistableRow<after_tFileInputDelimited_1Struct> {
                final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
                static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
                protected static final int DEFAULT_HASHCODE = 1;
                protected static final int PRIME = 31;
                protected int hashCode = DEFAULT_HASHCODE;
                public boolean hashCodeDirty = true;
```

if (object1 instanceof Comparable && object2 instanceof Comparable) {

```
public String loopKey;
public Integer work_year;
public Integer getWork_year() {
        return this.work_year;
}
public String experience_level;
public String getExperience_level() {
        return this.experience_level;
}
public String employment_type;
public String getEmployment_type() {
        return this.employment_type;
}
public String job_title;
public String getJob_title() {
        return this.job_title;
}
public Integer salary;
public Integer getSalary() {
        return this.salary;
}
```

```
public String salary_currency;
public String getSalary_currency() {
        return this.salary_currency;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
```

```
public Character company_size;
                public Character getCompany_size() {
                        return this.company_size;
                }
                @Override
                public int hashCode() {
                        if (this.hashCodeDirty) {
                                final int prime = PRIME;
                                int result = DEFAULT_HASHCODE;
                                result = prime * result + ((this.work_year == null) ? 0 :
this.work_year.hashCode());
                                this.hashCode = result;
                                this.hashCodeDirty = false;
                        }
                        return this.hashCode;
                }
                @Override
                public boolean equals(Object obj) {
                        if (this == obj)
                                return true;
                        if (obj == null)
                                return false;
                        if (getClass() != obj.getClass())
                                return false;
                        final after_tFileInputDelimited_1Struct other =
(after_tFileInputDelimited_1Struct) obj;
```

```
if (this.work_year == null) {
                if (other.work_year != null)
                        return false;
        } else if (!this.work_year.equals(other.work_year))
                return false;
        return true;
}
public void copyDataTo(after_tFileInputDelimited_1Struct other) {
        other.work_year = this.work_year;
        other.experience_level = this.experience_level;
        other.employment_type = this.employment_type;
        other.job_title = this.job_title;
        other.salary = this.salary;
        other.salary_currency = this.salary_currency;
        other.salary_in_usd = this.salary_in_usd;
        other.employee_residence = this.employee_residence;
        other.remote_ratio = this.remote_ratio;
        other.company_location = this.company_location;
        other.company_size = this.company_size;
}
public void copyKeysDataTo(after_tFileInputDelimited_1Struct other) {
        other.work_year = this.work_year;
```

```
private Integer readInteger(ObjectInputStream dis) throws IOException {
                         Integer intReturn;
                         int length = 0;
                         length = dis.readByte();
                         if (length == -1) {
                                 intReturn = null;
                         } else {
                                 intReturn = dis.readInt();
                         }
                         return intReturn;
                }
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                         Integer intReturn;
                         int length = 0;
                         length = dis.readByte();
                         if (length == -1) {
                                 intReturn = null;
                        } else {
                                 intReturn = dis.readInt();
                        }
                         return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                         if (intNum == null) {
                                 dos.writeByte(-1);
                         } else {
```

```
dos.writeByte(0);
                                dos.writeInt(intNum);
                       }
               }
                private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                       if (intNum == null) {
                               marshaller.writeByte(-1);
                       } else {
                               marshaller.writeByte(0);
                               marshaller.writeInt(intNum);
                       }
               }
                private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
```

```
dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String (common Byte Array\_LOCAL\_PROJECT\_etl\_project\_process, 0, length, utf8 Charset);
                       return strReturn;
               }
               private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
       unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
```

```
private void writeString(String str, ObjectOutputStream dos) throws IOException {
                        if (str == null) {
                                dos.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                 dos.writeInt(byteArray.length);
                                dos.write(byteArray);
                        }
                }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
                        if (str == null) {
                                marshaller.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                marshaller.writeInt(byteArray.length);
                                marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
```

```
this.experience_level = readString(dis);
        this.employment_type = readString(dis);
        this.job_title = readString(dis);
        this.salary = readInteger(dis);
        this.salary_currency = readString(dis);
        this.salary_in_usd = readInteger(dis);
        this.employee_residence = readString(dis);
        this.remote_ratio = readInteger(dis);
        this.company_location = readString(dis);
        length = dis.readByte();
        if (length == -1) {
                this.company_size = null;
        } else {
                this.company_size = dis.readChar();
        }
} catch (IOException e) {
        throw new RuntimeException(e);
}
```

```
}
                }
                public void readData(org.jboss.marshalling.Unmarshaller dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                        int length = 0;
                                        this.work_year = readInteger(dis);
                                        this.experience_level = readString(dis);
                                        this.employment_type = readString(dis);
                                        this.job_title = readString(dis);
                                        this.salary = readInteger(dis);
                                        this.salary_currency = readString(dis);
                                        this.salary_in_usd = readInteger(dis);
                                        this.employee_residence = readString(dis);
                                        this.remote_ratio = readInteger(dis);
```

```
this.company_location = readString(dis);
                        length = dis.readByte();
                        if (length == -1) {
                                this.company_size = null;
                        } else {
                                this.company_size = dis.readChar();
                        }
                } catch (IOException e) {
                        throw new RuntimeException(e);
                }
        }
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
```

```
writeString(this.employment_type, dos);
// String
writeString(this.job_title, dos);
// Integer
writeInteger(this.salary, dos);
// String
writeString(this.salary_currency, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
writeString(this.employee_residence, dos);
// Integer
writeInteger(this.remote_ratio, dos);
// String
writeString(this.company_location, dos);
// Character
```

```
if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public void writeData(org.jboss.marshalling.Marshaller dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
```

```
writeString(this.job_title, dos);
// Integer
writeInteger(this.salary, dos);
// String
writeString(this.salary_currency, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
writeString(this.employee_residence, dos);
// Integer
writeInteger(this.remote_ratio, dos);
// String
writeString(this.company_location, dos);
// Character
if (this.company_size == null) {
        dos.writeByte(-1);
} else {
```

```
dos.writeByte(0);
                       dos.writeChar(this.company_size);
               }
       } catch (IOException e) {
               throw new RuntimeException(e);
       }
}
public String toString() {
       StringBuilder sb = new StringBuilder();
        sb.append(super.toString());
       sb.append("[");
        sb.append("work_year=" + String.valueOf(work_year));
        sb.append(",experience_level=" + experience_level);
        sb.append(",employment_type=" + employment_type);
        sb.append(",job_title=" + job_title);
        sb.append(",salary=" + String.valueOf(salary));
        sb.append(",salary_currency=" + salary_currency);
        sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
        sb.append(",employee_residence=" + employee_residence);
        sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
        sb.append(",company_location=" + company_location);
        sb.append(",company_size=" + String.valueOf(company_size));
        sb.append("]");
       return sb.toString();
}
```

```
* Compare keys
*/
public int compareTo(after_tFileInputDelimited_1Struct other) {
        int returnValue = -1;
        returnValue = checkNullsAndCompare(this.work year, other.work year);
        if (returnValue != 0) {
                return return Value;
        }
        return returnValue;
}
private int checkNullsAndCompare(Object object1, Object object2) {
        int returnValue = 0;
        if (object1 instanceof Comparable && object2 instanceof Comparable) {
                returnValue = ((Comparable) object1).compareTo(object2);
        } else if (object1 != null && object2 != null) {
                returnValue = compareStrings(object1.toString(), object2.toString());
        } else if (object1 == null && object2 != null) {
                returnValue = 1;
        } else if (object1 != null && object2 == null) {
                returnValue = -1;
        } else {
                returnValue = 0;
        }
        return returnValue;
}
```

```
private int compareStrings(String string1, String string2) {
                       return string1.compareTo(string2);
               }
       }
       public void tFileInputDelimited 1Process(final java.util.Map<String, Object> globalMap)
throws TalendException {
               globalMap.put("tFileInputDelimited_1_SUBPROCESS_STATE", 0);
               final boolean execStat = this.execStat;
               String iterateId = "";
               String currentComponent = "";
               java.util.Map<String, Object> resourceMap = new java.util.HashMap<String,
Object>();
               try {
                       // TDI-39566 avoid throwing an useless Exception
                       boolean resumeIt = true;
                       if (globalResumeTicket == false && resumeEntryMethodName != null) {
                               String currentMethodName = new
java.lang.Exception().getStackTrace()[0].getMethodName();
                               resumeIt = resumeEntryMethodName.equals(currentMethodName);
                       }
                       if (resumeIt || globalResumeTicket) { // start the resume
                               globalResumeTicket = true;
                               tFileInputJSON_1Process(globalMap);
```

```
output_salStruct output_sal = new output_salStruct();
                                rejectedStruct rejected = new rejectedStruct();
                                /**
                                * [tFileOutputDelimited_1 begin ] start
                                */
                                ok Hash.put("tFileOutputDelimited 1", false);
                                start_Hash.put("tFileOutputDelimited_1",
System.currentTimeMillis());
                                currentComponent = "tFileOutputDelimited_1";
                                int tos_count_tFileOutputDelimited_1 = 0;
                                String fileName_tFileOutputDelimited_1 = "";
                                fileName_tFileOutputDelimited_1 = (new java.io.File(
                                               "C:/Program Files (x86)/TOS_DI-
8.0.1/studio/workspace/ETL_project/sal_outfile.csv"))
                                                               .getAbsolutePath().replace("\\", "/");
                                String fullName_tFileOutputDelimited_1 = null;
                                String extension_tFileOutputDelimited_1 = null;
                                String directory_tFileOutputDelimited_1 = null;
                                if ((fileName_tFileOutputDelimited_1.indexOf("/") != -1)) {
                                       if (fileName_tFileOutputDelimited_1.lastIndexOf(".") <
fileName_tFileOutputDelimited_1
                                                       .lastIndexOf("/")) {
                                               fullName tFileOutputDelimited 1 =
fileName_tFileOutputDelimited_1;
                                               extension_tFileOutputDelimited_1 = "";
                                       } else {
```

row3Struct row3 = new row3Struct();

```
fullName tFileOutputDelimited 1 =
fileName_tFileOutputDelimited_1.substring(0,
       fileName_tFileOutputDelimited_1.lastIndexOf("."));
                                               extension_tFileOutputDelimited_1 =
fileName_tFileOutputDelimited_1
       .substring(fileName_tFileOutputDelimited_1.lastIndexOf("."));
                                       }
                                       directory_tFileOutputDelimited_1 =
fileName_tFileOutputDelimited_1.substring(0,
       fileName_tFileOutputDelimited_1.lastIndexOf("/"));
                               } else {
                                       if (fileName_tFileOutputDelimited_1.lastIndexOf(".") != -1) {
                                               fullName tFileOutputDelimited 1 =
fileName_tFileOutputDelimited_1.substring(0,
       fileName_tFileOutputDelimited_1.lastIndexOf("."));
                                               extension_tFileOutputDelimited_1 =
fileName tFileOutputDelimited 1
        .substring(fileName_tFileOutputDelimited_1.lastIndexOf("."));
                                       } else {
                                               fullName_tFileOutputDelimited_1 =
fileName_tFileOutputDelimited_1;
                                               extension tFileOutputDelimited 1 = "";
                                       }
                                       directory tFileOutputDelimited 1 = "";
                               }
                               boolean isFileGenerated_tFileOutputDelimited_1 = true;
                               java.io.File filetFileOutputDelimited_1 = new
java.io.File(fileName_tFileOutputDelimited_1);
                               globalMap.put("tFileOutputDelimited_1_FILE_NAME",
fileName_tFileOutputDelimited_1);
                               if (filetFileOutputDelimited_1.exists()) {
```

```
throw new RuntimeException("The particular file \"" +
filetFileOutputDelimited_1.getAbsoluteFile()
                                                       + "\" already exist. If you want to overwrite
the file, please uncheck the"
                                                       + " \"Throw an error if the file already exist\"
option in Advanced settings.");
                                }
                                int nb_line_tFileOutputDelimited_1 = 0;
                                int splitedFileNo_tFileOutputDelimited_1 = 0;
                                int currentRow_tFileOutputDelimited_1 = 0;
                                final String OUT DELIM tFileOutputDelimited 1 = /** Start field
tFileOutputDelimited_1:FIELDSEPARATOR */
                                                ","/** End field
tFileOutputDelimited_1:FIELDSEPARATOR */
                                final String OUT_DELIM_ROWSEP_tFileOutputDelimited_1 = /**
                                                * Start field
                                                * tFileOutputDelimited_1:ROWSEPARATOR
                                                */
                                                "\n"/** End field
tFileOutputDelimited 1:ROWSEPARATOR */
                                // create directory only if not exists
                                if (directory_tFileOutputDelimited_1 != null &&
directory_tFileOutputDelimited_1.trim().length() != 0) {
                                        java.io.File dir tFileOutputDelimited 1 = new
java.io.File(directory_tFileOutputDelimited_1);
                                        if (!dir_tFileOutputDelimited_1.exists()) {
                                               dir_tFileOutputDelimited_1.mkdirs();
```

```
}
                               }
                               // routines.system.Row
                               java.io.Writer outtFileOutputDelimited_1 = null;
                               java.io.File fileToDelete_tFileOutputDelimited_1 = new
java.io.File(fileName_tFileOutputDelimited_1);
                               if (fileToDelete_tFileOutputDelimited_1.exists()) {
                                      fileToDelete_tFileOutputDelimited_1.delete();
                               }
                               outtFileOutputDelimited_1 = new java.io.BufferedWriter(new
java.io.OutputStreamWriter(
                                              new
java.io.FileOutputStream(fileName_tFileOutputDelimited_1, false), "ISO-8859-15"));
                               if (filetFileOutputDelimited_1.length() == 0) {
                                      outtFileOutputDelimited_1.write("work_year");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                      outtFileOutputDelimited_1.write("experience_level");
        outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                      outtFileOutputDelimited_1.write("employment_type");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                      outtFileOutputDelimited_1.write("job_title");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                      outtFileOutputDelimited_1.write("salary_in_usd");
        outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                      outtFileOutputDelimited_1.write("employee_residence");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
```

```
outtFileOutputDelimited_1.write("remote_ratio");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                     outtFileOutputDelimited_1.write("company_location");
       outtFileOutputDelimited_1.write(OUT_DELIM_tFileOutputDelimited_1);
                                     outtFileOutputDelimited_1.write("company_size");
       outtFileOutputDelimited\_1.write(OUT\_DELIM\_ROWSEP\_tFileOutputDelimited\_1);\\
                                     outtFileOutputDelimited_1.flush();
                              }
                              resourceMap.put("out_tFileOutputDelimited_1",
outtFileOutputDelimited_1);
                              resourceMap.put("nb_line_tFileOutputDelimited_1",
nb_line_tFileOutputDelimited_1);
                              /**
                              * [tFileOutputDelimited_1 begin ] stop
                              */
                              /**
                              * [tLogRow_2 begin ] start
                              */
                              ok_Hash.put("tLogRow_2", false);
                              start_Hash.put("tLogRow_2", System.currentTimeMillis());
                              currentComponent = "tLogRow_2";
                              int tos_count_tLogRow_2 = 0;
```

```
class Util_tLogRow_2 {
                                          String[] des_top = { ".", ".", "-", "+" };
                                          String[] des_head = { "|=", "=|", "-", "+" };
                                          String[] des_bottom = { "'", "'", "-", "+" };
                                          String name = "";
                                           java.util.List<String[]> list = new
java.util.ArrayList<String[]>();
                                           int[] colLengths = new int[9];
                                           public void addRow(String[] row) {
                                                   for (int i = 0; i < 9; i++) {
                                                            if (row[i] != null) {
                                                                    colLengths[i] =
Math.max(colLengths[i], row[i].length());
                                                            }
                                                   }
                                                   list.add(row);
                                           }
                                           public void setTableName(String name) {
                                                   this.name = name;
                                           }
```

```
StringBuilder sb = new StringBuilder();
                                                   sb.append(print(des_top));
                                                   int totals = 0;
                                                   for (int i = 0; i < colLengths.length; i++) {
                                                           totals = totals + colLengths[i];
                                                   }
                                                   // name
                                                   sb.append("|");
                                                   int k = 0;
                                                   for (k = 0; k < (totals + 8 - name.length()) / 2; k++) {
                                                            sb.append(' ');
                                                   }
                                                   sb.append(name);
                                                   for (int i = 0; i < totals + 8 - name.length() - k; i++) {
                                                            sb.append(' ');
                                                   }
                                                   sb.append("|\n");
                                                   // head and rows
                                                   sb.append(print(des_head));
                                                   for (int i = 0; i < list.size(); i++) {
                                                            String[] row = list.get(i);
                                                            java.util.Formatter formatter = new
java.util.Formatter(new StringBuilder());
```

public StringBuilder format() {

```
StringBuilder sbformat = new StringBuilder();
sbformat.append("|%1$-");
sbformat.append(colLengths[0]);
sbformat.append("s");
sbformat.append("|%2$-");
sbformat.append(colLengths[1]);
sbformat.append("s");
sbformat.append("|%3$-");
sbformat.append(colLengths[2]);
sbformat.append("s");
sbformat.append("|%4$-");
sbformat.append(colLengths[3]);
sbformat.append("s");
sbformat.append("|%5$-");
sbformat.append(colLengths[4]);
sbformat.append("s");
sbformat.append("|%6$-");
sbformat.append(colLengths[5]);
sbformat.append("s");
sbformat.append("|%7$-");
sbformat.append(colLengths[6]);
sbformat.append("s");
sbformat.append("|%8$-");
```

```
sbformat.append(colLengths[7]);
                                                         sbformat.append("s");
                                                         sbformat.append("|%9$-");
                                                         sbformat.append(colLengths[8]);
                                                         sbformat.append("s");
                                                         sbformat.append("|\n");
                                                         formatter.format(sbformat.toString(),
(Object[]) row);
                                                         sb.append(formatter.toString());
                                                         if (i == 0)
                                                                 sb.append(print(des_head)); // print
the head
                                                }
                                                // end
                                                sb.append(print(des_bottom));
                                                return sb;
                                        }
                                        private StringBuilder print(String[] fillChars) {
                                                 StringBuilder sb = new StringBuilder();
                                                // first column
                                                sb.append(fillChars[0]);
                                                for (int i = 0; i < colLengths[0] - fillChars[0].length() +
1; i++) {
                                                         sb.append(fillChars[2]);
                                                }
                                                 sb.append(fillChars[3]);
```

```
for (int i = 0; i < colLengths[1] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[2] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[3] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[4] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[5] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[6] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                     sb.append(fillChars[3]);
                                                     for (int i = 0; i < colLengths[7] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
```

```
}
                                              sb.append(fillChars[3]);
                                              // last column
                                              for (int i = 0; i < colLengths[8] - fillChars[1].length() +
1; i++) {
                                                      sb.append(fillChars[2]);
                                              }
                                              sb.append(fillChars[1]);
                                              sb.append("\n");
                                              return sb;
                                       }
                                       public boolean isTableEmpty() {
                                              if (list.size() > 1)
                                                      return false;
                                              return true;
                                       }
                               }
                               Util_tLogRow_2 util_tLogRow_2 = new Util_tLogRow_2();
                               util_tLogRow_2.setTableName("tLogRow_2");
                               util_tLogRow_2.addRow(new String[] { "work_year",
"experience_level", "employment_type", "job_title",
                                              "salary_in_usd", "employee_residence",
"remote_ratio", "company_location", "company_size", });
                               StringBuilder strBuffer_tLogRow_2 = null;
                               int nb_line_tLogRow_2 = 0;
* [tLogRow_2 begin ] stop
                                */
```

```
* [tMap_1 begin] start
                        ok_Hash.put("tMap_1", false);
                        start_Hash.put("tMap_1", System.currentTimeMillis());
                        currentComponent = "tMap_1";
                        int tos_count_tMap_1 = 0;
// # Lookup's keys initialization
      org.talend.designer.components.lookup.memory.AdvancedMemoryLookup<row4Struct>
tHash_Lookup_row4 =
(org.talend.designer.components.lookup.memory.AdvancedMemoryLookup<row4Struct>)
((org.talend.designer.components.lookup.memory.AdvancedMemoryLookup<row4Struct>)
globalMap
                                    .get("tHash_Lookup_row4"));
                        row4Struct row4HashKey = new row4Struct();
                        row4Struct row4Default = new row4Struct();
// # Vars initialization
                        class Var__tMap_1__Struct {
                        }
                        Var__tMap_1__Struct Var__tMap_1 = new Var__tMap_1__Struct();
```

```
// # Outputs initialization
                            output_salStruct output_sal_tmp = new output_salStruct();
                            rejectedStruct rejected_tmp = new rejectedStruct();
/**
                             * [tMap_1 begin ] stop
                             */
                            /**
                             * [tFileInputDelimited_1 begin ] start
                             */
                            ok_Hash.put("tFileInputDelimited_1", false);
                            start_Hash.put("tFileInputDelimited_1", System.currentTimeMillis());
                            currentComponent = "tFileInputDelimited_1";
                            int tos_count_tFileInputDelimited_1 = 0;
                            final routines.system.RowState rowstate_tFileInputDelimited_1 =
new routines.system.RowState();
                            int nb_line_tFileInputDelimited_1 = 0;
                            org.talend.fileprocess.FileInputDelimited fid_tFileInputDelimited_1 =
null;
                            int limit_tFileInputDelimited_1 = -1;
                            try {
```

```
(x86)/TOS_DI-8.0.1/studio/workspace/ETL_project/salaries.csv";
                                        if (filename_tFileInputDelimited_1 instanceof
java.io.InputStream) {
                                                int footer_value_tFileInputDelimited_1 = 0,
random_value_tFileInputDelimited_1 = -1;
                                                if (footer_value_tFileInputDelimited_1 > 0 ||
random_value_tFileInputDelimited_1 > 0) {
                                                        throw new java.lang.Exception(
                                                                        "When the input source is a
stream, footer and random shouldn't be bigger than 0.");
                                                }
                                        }
                                        try {
                                                fid_tFileInputDelimited_1 = new
org.talend.fileprocess.FileInputDelimited(
                                                                "C:/Program Files (x86)/TOS DI-
8.0.1/studio/workspace/ETL_project/salaries.csv",
                                                                "US-ASCII", ",", "\n", false, 1, 0,
limit_tFileInputDelimited_1, -1, false);
                                        } catch (java.lang.Exception e) {
        globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE", e.getMessage());
                                                System.err.println(e.getMessage());
                                        }
                                        while (fid_tFileInputDelimited_1 != null &&
fid_tFileInputDelimited_1.nextRecord()) {
                                                rowstate_tFileInputDelimited_1.reset();
                                                row3 = null;
```

Object filename_tFileInputDelimited_1 = "C:/Program Files

```
boolean whetherReject_tFileInputDelimited_1 =
false;
                                               row3 = new row3Struct();
                                               try {
                                                       int
columnIndexWithD_tFileInputDelimited_1 = 0;
                                                       String temp = "";
                                                       columnIndexWithD_tFileInputDelimited_1 =
0;
                                                       temp =
fid\_tFileInputDelimited\_1.get(columnIndexWithD\_tFileInputDelimited\_1);\\
                                                       if (temp.length() > 0) {
                                                              try {
                                                                       row3.work_year =
ParserUtils.parseTo_Integer(temp);
                                                              } catch (java.lang.Exception
ex_tFileInputDelimited_1) {
        globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE",
        ex_tFileInputDelimited_1.getMessage());
        rowstate_tFileInputDelimited_1.setException(new RuntimeException(String.format(
                                                                                      "Couldn't
parse value for column '%s' in '%s', value is '%s'. Details: %s",
        "work_year", "row3", temp, ex_tFileInputDelimited_1),
```

```
ex_tFileInputDelimited_1));
                                                               }
                                                       } else {
                                                               row3.work_year = null;
                                                       }
                                                       columnIndexWithD_tFileInputDelimited_1 =
1;
                                                       row3.experience_level =
fid_tFileInputDelimited_1
        .get(columnIndexWithD_tFileInputDelimited_1);
                                                       columnIndexWithD_tFileInputDelimited_1 =
2;
                                                       row3.employment_type =
fid\_tFileInputDelimited\_1
        . get (column Index With D\_tFile Input Delimited\_1); \\
                                                       columnIndexWithD_tFileInputDelimited_1 =
3;
                                                       row3.job_title =
fid\_tFileInputDelimited\_1.get(columnIndexWithD\_tFileInputDelimited\_1);\\
                                                       columnIndexWithD_tFileInputDelimited_1 =
4;
```

```
temp =
fid\_tFileInputDelimited\_1.get(columnIndexWithD\_tFileInputDelimited\_1);\\
                                                        if (temp.length() > 0) {
                                                               try {
                                                                        row3.salary =
ParserUtils.parseTo_Integer(temp);
                                                               } catch (java.lang.Exception
ex_tFileInputDelimited_1) {
        globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE",
        ex_tFileInputDelimited_1.getMessage());
        rowstate_tFileInputDelimited_1.setException(new RuntimeException(String.format(
                                                                                        "Couldn't
parse value for column '%s' in '%s', value is '%s'. Details: %s",
                                                                                        "salary",
"row3", temp, ex_tFileInputDelimited_1),
        ex_tFileInputDelimited_1));
                                                               }
                                                       } else {
                                                               row3.salary = null;
                                                       }
                                                        columnIndexWithD_tFileInputDelimited_1 =
5;
```

```
row3.salary_currency =
fid_tFileInputDelimited_1
        .get(columnIndexWithD_tFileInputDelimited_1);
                                                       columnIndexWithD_tFileInputDelimited_1 =
6;
                                                       temp =
fid_tFileInputDelimited_1.get(columnIndexWithD_tFileInputDelimited_1);
                                                       if (temp.length() > 0) {
                                                              try {
                                                                      row3.salary_in_usd =
ParserUtils.parseTo_Integer(temp);
                                                              } catch (java.lang.Exception
ex_tFileInputDelimited_1) {
        globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE",
        ex_tFileInputDelimited_1.getMessage());
        rowstate_tFileInputDelimited_1.setException(new RuntimeException(String.format(
                                                                                      "Couldn't
parse value for column '%s' in '%s', value is '%s'. Details: %s",
        "salary_in_usd", "row3", temp, ex_tFileInputDelimited_1),
        ex_tFileInputDelimited_1));
                                                              }
                                                       } else {
```

```
row3.salary_in_usd = null;
                                                      }
                                                      columnIndexWithD_tFileInputDelimited_1 =
7;
                                                      row3.employee_residence =
fid_tFileInputDelimited_1
        .get(columnIndexWithD_tFileInputDelimited_1);
                                                      columnIndexWithD_tFileInputDelimited_1 =
8;
                                                      temp =
fid\_tFileInputDelimited\_1.get(columnIndexWithD\_tFileInputDelimited\_1);\\
                                                      if (temp.length() > 0) {
                                                              try {
                                                                      row3.remote_ratio =
ParserUtils.parseTo_Integer(temp);
                                                              } catch (java.lang.Exception
ex_tFileInputDelimited_1) {
       globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE",
       ex_tFileInputDelimited_1.getMessage());
       rowstate_tFileInputDelimited_1.setException(new RuntimeException(String.format(
                                                                                      "Couldn't
parse value for column '%s' in '%s', value is '%s'. Details: %s",
```

```
"remote_ratio", "row3", temp, ex_tFileInputDelimited_1),
        ex_tFileInputDelimited_1));
                                                               }
                                                       } else {
                                                               row3.remote_ratio = null;
                                                       }
                                                       columnIndexWithD\_tFileInputDelimited\_1 =
9;
                                                       row3.company_location =
fid\_tFileInputDelimited\_1
        .get(columnIndexWithD_tFileInputDelimited_1);
                                                       columnIndexWithD_tFileInputDelimited_1 =
10;
                                                       temp =
fid\_tFileInputDelimited\_1.get(columnIndexWithD\_tFileInputDelimited\_1);\\
                                                       if (temp.length() > 0) {
                                                               try {
                                                                       row3.company_size =
ParserUtils.parseTo_Character(temp);
                                                               } catch (java.lang.Exception
ex_tFileInputDelimited_1) {
```

```
globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE",
        ex_tFileInputDelimited_1.getMessage());
        rowstate_tFileInputDelimited_1.setException(new RuntimeException(String.format(
                                                                                      "Couldn't
parse value for column '%s' in '%s', value is '%s'. Details: %s",
        "company_size", "row3", temp, ex_tFileInputDelimited_1),
        ex_tFileInputDelimited_1));
                                                              }
                                                       } else {
                                                               row3.company_size = null;
                                                       }
                                                       if
(rowstate_tFileInputDelimited_1.getException() != null) {
                                                              throw
rowstate_tFileInputDelimited_1.getException();
                                                       }
                                               } catch (java.lang.Exception e) {
        globalMap.put("tFileInputDelimited_1_ERROR_MESSAGE", e.getMessage());
                                                       whetherReject_tFileInputDelimited_1 = true;
                                                       System.err.println(e.getMessage());
                                                       row3 = null;
```

```
/**
                                                * [tFileInputDelimited_1 begin ] stop
                                                */
                                               /**
                                                * [tFileInputDelimited_1 main ] start
                                                */
                                               currentComponent = "tFileInputDelimited_1";
                                               tos_count_tFileInputDelimited_1++;
                                               /**
                                                * [tFileInputDelimited_1 main ] stop
                                                */
                                               /**
                                                * [tFileInputDelimited_1 process_data_begin ] start
                                                */
                                               currentComponent = "tFileInputDelimited_1";
                                               /**
                                                * [tFileInputDelimited_1 process_data_begin ] stop
                                                */
// Start of branch "row3"
                                               if (row3 != null) {
```

}

```
* [tMap_1 main] start
                                           */
                                          currentComponent = "tMap_1";
                                          boolean
hasCasePrimitiveKeyWithNull_tMap_1 = false;
                                          // # Input tables (lookups)
                                          boolean rejectedInnerJoin_tMap_1 = false;
                                          boolean mainRowRejected_tMap_1 = false;
                                          // Starting Lookup Table "row4"
                                          boolean forceLooprow4 = false;
                                          row4Struct row4ObjectFromLookup = null;
                                          if (!rejectedInnerJoin_tMap_1) { //
G_TM_M_020
      hasCasePrimitiveKeyWithNull_tMap_1 = false;
                                                row4HashKey.work_year =
row3.work_year;
                                                row4HashKey.experience_level =
row3.experience_level;
```

row3.employment_type;	row4HashKey.employment_type =
row3.job_title;	row4HashKey.job_title =
	row4HashKey.salary = row3.salary;
row3.salary_currency;	row4HashKey.salary_currency =
row3.salary_in_usd;	row4HashKey.salary_in_usd =
row3.employee_residence;	row4HashKey.employee_residence =
row3.remote_ratio;	row4HashKey.remote_ratio =
row3.company_location;	row4HashKey.company_location =
row3.company_size;	row4HashKey.company_size =
	row4HashKey.hashCodeDirty = true;
tHash_Lookup_row4.lookup(row4HashKey);	
// G_TM_M_090	if (!tHash_Lookup_row4.hasNext()) {

"', row4.company_size = "" +

```
}//G_TM_M_090
                                                      } // G_TM_M_020
                                                      if (tHash_Lookup_row4 != null &&
tHash_Lookup_row4.getCount(row4HashKey) > 1) { // G 071
                                                             // System.out.println("WARNING:
UNIQUE MATCH is configured for the lookup 'row4'
                                                             // and it contains more one result
from keys : row4.work_year = "" +
                                                             // row4HashKey.work_year + "',
row4.experience_level = "" +
                                                             // row4HashKey.experience_level +
"', row4.employment type = "" +
                                                             // row4HashKey.employment_type +
"', row4.job_title = "" + row4HashKey.job_title
                                                             // + "', row4.salary = '" +
row4HashKey.salary + "', row4.salary_currency = "' +
                                                             // row4HashKey.salary_currency + "',
row4.salary_in_usd = "" +
                                                             // row4HashKey.salary_in_usd + "',
row4.employee_residence = "" +
row4HashKey.employee_residence + "', row4.remote_ratio = "" +
                                                             // row4HashKey.remote_ratio + "',
row4.company location = "" +
                                                             // row4HashKey.company_location +
```

row4Struct row4 = null;

}//G071

// row4HashKey.company_size + "'");

```
row4Struct fromLookup_row4 = null;
                                      row4 = row4Default;
                                      if (tHash_Lookup_row4 != null &&
tHash_Lookup_row4.hasNext()) { // G 099
                                           fromLookup_row4 =
tHash_Lookup_row4.next();
                                      }// G 099
                                      if (fromLookup_row4 != null) {
                                           row4 = fromLookup_row4;
                                      }
                                      { // start of Var scope
                                           //
// # Vars tables
                                           Var__tMap_1__Struct Var =
//
// # Output tables
                                           output_sal = null;
                                           rejected = null;
                                           if (!rejectedInnerJoin_tMap_1) {
```

```
// # Output table : 'output_sal'
                                                                    output_sal_tmp.work_year =
row3.work_year;
       output_sal_tmp.experience_level = row3.experience_level;
       output_sal_tmp.employment_type = row3.employment_type;
                                                                    output_sal_tmp.job_title =
row3.job_title;
       output_sal_tmp.salary_in_usd = row3.salary_in_usd;
       output_sal_tmp.employee_residence = row3.employee_residence;
       output_sal_tmp.remote_ratio = row3.remote_ratio;
       output_sal_tmp.company_location = row3.company_location;
       output_sal_tmp.company_size = row3.company_size;
                                                                    output_sal =
output_sal_tmp;
                                                            } // closing inner join bracket (1)
// ##### START REJECTS #####
// # Output reject table : 'rejected'
// # Filter conditions
                                                            if (rejectedInnerJoin_tMap_1) {
                                                                    rejected_tmp.work_year =
row3.work_year;
       rejected_tmp.experience_level = row3.experience_level;
       rejected_tmp.employment_type = row3.employment_type;
                                                                    rejected_tmp.job_title =
row3.job_title;
```

```
rejected_tmp.salary_in_usd
= row3.salary_in_usd;
       rejected_tmp.employee_residence = row3.employee_residence;
                                                               rejected_tmp.remote_ratio
= row3.remote_ratio;
       rejected_tmp.company_location = row3.company_location;
                                                               rejected_tmp.company_size
= row3.company_size;
                                                               rejected = rejected_tmp;
                                                        } // closing filter/reject
} // end of Var scope
                                                 rejectedInnerJoin_tMap_1 = false;
                                                 tos_count_tMap_1++;
                                                 /**
                                                  * [tMap_1 main] stop
                                                  */
                                                  * [tMap_1 process_data_begin ] start
                                                  */
                                                 currentComponent = "tMap_1";
                                                 /**
                                                  * [tMap_1 process_data_begin ] stop
                                                  */
```

```
// Start of branch "output_sal"
                                                      if (output_sal != null) {
                                                               * [tFileOutputDelimited_1 main ]
start
                                                               */
                                                              currentComponent =
"tFileOutputDelimited_1";
                                                              StringBuilder
sb_tFileOutputDelimited_1 = new StringBuilder();
                                                              if (output_sal.work_year != null) {
       sb_tFileOutputDelimited_1.append(output_sal.work_year);
                                                              }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                              if (output_sal.experience_level !=
null) {
       sb_tFileOutputDelimited_1.append(output_sal.experience_level);
                                                              }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                              if (output_sal.employment_type !=
null) {
       sb_tFileOutputDelimited_1.append(output_sal.employment_type);
                                                              }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                              if (output_sal.job_title != null) {
```

```
sb_tFileOutputDelimited_1.append(output_sal.job_title);
                                                            }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                            if (output_sal.salary_in_usd != null) {
       sb_tFileOutputDelimited_1.append(output_sal.salary_in_usd);
                                                            }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                            if (output_sal.employee_residence
!= null) {
       sb tFileOutputDelimited 1.append(output sal.employee residence);
                                                             }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                            if (output_sal.remote_ratio != null) {
       sb_tFileOutputDelimited_1.append(output_sal.remote_ratio);
                                                            }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                            if (output_sal.company_location !=
null) {
       sb tFileOutputDelimited_1.append(output_sal.company_location);
                                                            }
       sb_tFileOutputDelimited_1.append(OUT_DELIM_tFileOutputDelimited_1);
                                                            if (output_sal.company_size != null) {
       sb_tFileOutputDelimited_1.append(output_sal.company_size);
                                                            }
```

```
sb_tFileOutputDelimited_1.append(OUT_DELIM_ROWSEP_tFileOutputDelimited_1);
                                                             nb_line_tFileOutputDelimited_1++;
       resourceMap.put("nb_line_tFileOutputDelimited_1", nb_line_tFileOutputDelimited_1);
       outtFileOutputDelimited_1.write(sb_tFileOutputDelimited_1.toString());
       tos_count_tFileOutputDelimited_1++;
                                                             /**
                                                             * [tFileOutputDelimited_1 main ]
stop
                                                             */
                                                             /**
                                                             * [tFileOutputDelimited_1
process_data_begin ] start
                                                             */
                                                             currentComponent =
"tFileOutputDelimited_1";
                                                             /**
                                                             * [tFileOutputDelimited_1
process_data_begin ] stop
                                                             */
                                                             /**
                                                             * [tFileOutputDelimited_1
process_data_end ] start
```

```
*/
                                                           currentComponent =
"tFileOutputDelimited_1";
                                                           /**
                                                            * [tFileOutputDelimited_1
process_data_end ] stop
                                                            */
                                                   } // End of branch "output_sal"
// Start of branch "rejected"
                                                   if (rejected != null) {
                                                           /**
                                                           * [tLogRow_2 main ] start
                                                            */
                                                           currentComponent = "tLogRow_2";
String[] row_tLogRow_2 = new
String[9];
                                                           if (rejected.work_year != null) { //
                                                                  row_tLogRow_2[0] =
String.valueOf(rejected.work_year);
                                                           }//
```

```
if (rejected.experience_level != null)
{//
                                                                        row_tLogRow_2[1] =
String.valueOf(rejected.experience_level);
                                                                }//
                                                                if (rejected.employment_type !=
null) { //
                                                                        row_tLogRow_2[2] =
String.valueOf(rejected.employment_type);
                                                                }//
                                                                if (rejected.job_title != null) { //
                                                                        row_tLogRow_2[3] =
String.valueOf(rejected.job_title);
                                                                }//
                                                                if (rejected.salary_in_usd != null) { //
                                                                        row_tLogRow_2[4] =
String.valueOf(rejected.salary_in_usd);
                                                                }//
                                                                if (rejected.employee_residence !=
null) { //
                                                                        row_tLogRow_2[5] =
String.valueOf(rejected.employee_residence);
                                                                }//
                                                                if (rejected.remote_ratio != null) { //
```

```
row_tLogRow_2[6] =
String.valueOf(rejected.remote_ratio);
                                                          }//
                                                          if (rejected.company_location !=
null) { //
                                                                 row_tLogRow_2[7] =
String.valueOf(rejected.company_location);
                                                          }//
                                                          if (rejected.company_size != null) { //
                                                                 row_tLogRow_2[8] =
String.valueOf(rejected.company_size);
                                                          }//
       util_tLogRow_2.addRow(row_tLogRow_2);
                                                          nb_line_tLogRow_2++;
//////
//////
tos_count_tLogRow_2++;
                                                          /**
                                                          * [tLogRow_2 main ] stop
                                                          */
```

```
/**
                                                            * [tLogRow_2 process_data_begin]
start
                                                            */
                                                           currentComponent = "tLogRow_2";
                                                           /**
                                                            * [tLogRow_2 process_data_begin ]
stop
                                                            */
                                                           /**
                                                            * [tLogRow_2 process_data_end ]
start
                                                            */
                                                           currentComponent = "tLogRow_2";
                                                           /**
                                                            * [tLogRow_2 process_data_end ]
stop
                                                            */
                                                    } // End of branch "rejected"
                                                    /**
                                                    * [tMap_1 process_data_end] start
                                                    */
                                                    currentComponent = "tMap_1";
```

```
* [tMap_1 process_data_end] stop
                                                         */
                                                } // End of branch "row3"
                                                /**
                                                 * [tFileInputDelimited_1 process_data_end] start
                                                 */
                                                currentComponent = "tFileInputDelimited_1";
                                                /**
                                                 * [tFileInputDelimited_1 process_data_end ] stop
                                                 */
                                                /**
                                                 * [tFileInputDelimited_1 end ] start
                                                 */
                                                currentComponent = "tFileInputDelimited_1";
                                        }
                                } finally {
                                        if (!((Object) ("C:/Program Files (x86)/TOS_DI-
8.0.1/studio/workspace/ETL_project/salaries.csv") instanceof java.io.InputStream)) {
                                                if (fid_tFileInputDelimited_1 != null) {
                                                        fid_tFileInputDelimited_1.close();
                                                }
                                        }
                                        if (fid_tFileInputDelimited_1 != null) {
```

/**

```
globalMap.put("tFileInputDelimited_1_NB_LINE",
fid_tFileInputDelimited_1.getRowNumber());
                                 }
                          }
                          ok_Hash.put("tFileInputDelimited_1", true);
                          end_Hash.put("tFileInputDelimited_1", System.currentTimeMillis());
                          /**
                           * [tFileInputDelimited_1 end ] stop
                           */
                          /**
                           * [tMap_1 end] start
                           */
                          currentComponent = "tMap_1";
// # Lookup hashes releasing
                          if (tHash_Lookup_row4 != null) {
                                 tHash_Lookup_row4.endGet();
                          }
                          globalMap.remove("tHash_Lookup_row4");
ok_Hash.put("tMap_1", true);
                          end_Hash.put("tMap_1", System.currentTimeMillis());
```

```
* [tMap_1 end] stop
                                */
                               /**
                                * [tFileOutputDelimited_1 end ] start
                                */
                               currentComponent = "tFileOutputDelimited_1";
                               if (outtFileOutputDelimited_1 != null) {
                                       outtFileOutputDelimited_1.flush();
                                       outtFileOutputDelimited_1.close();
                               }
                               globalMap.put("tFileOutputDelimited_1_NB_LINE",
nb_line_tFileOutputDelimited_1);
                               globalMap.put("tFileOutputDelimited_1_FILE_NAME",
fileName_tFileOutputDelimited_1);
                               resource {\bf Map.put("finish\_tFileOutputDelimited\_1", true);}
                               ok_Hash.put("tFileOutputDelimited_1", true);
                               end_Hash.put("tFileOutputDelimited_1",
System.currentTimeMillis());
                               /**
                                * [tFileOutputDelimited_1 end ] stop
                                */
                                * [tLogRow_2 end] start
```

```
*/
                             currentComponent = "tLogRow_2";
//////
                             java.io.PrintStream consoleOut_tLogRow_2 = null;
                             if (globalMap.get("tLogRow_CONSOLE") != null) {
                                    consoleOut_tLogRow_2 = (java.io.PrintStream)
globalMap.get("tLogRow_CONSOLE");
                             } else {
                                    consoleOut_tLogRow_2 = new java.io.PrintStream(new
java.io.BufferedOutputStream(System.out));
                                    globalMap.put("tLogRow_CONSOLE",
consoleOut_tLogRow_2);
                             }
                             consoleOut_tLogRow_2.println(util_tLogRow_2.format().toString());
                             consoleOut_tLogRow_2.flush();
//////
                             globalMap.put("tLogRow_2_NB_LINE", nb_line_tLogRow_2);
ok_Hash.put("tLogRow_2", true);
                             end_Hash.put("tLogRow_2", System.currentTimeMillis());
                             * [tLogRow_2 end] stop
```

} // end the resume

```
} catch (java.lang.Exception e) {
                       TalendException te = new TalendException(e, currentComponent,
globalMap);
                       throw te;
               } catch (java.lang.Error error) {
                       throw error;
               } finally {
                       // free memory for "tMap_1"
                        globalMap.remove("tHash_Lookup_row4");
                       try {
                                /**
                                * [tFileInputDelimited_1 finally ] start
                                */
                                currentComponent = "tFileInputDelimited_1";
                                /**
                                * [tFileInputDelimited_1 finally ] stop
                                */
                                /**
                                * [tMap_1 finally] start
                                */
```

```
currentComponent = "tMap_1";
                                /**
                                * [tMap_1 finally ] stop
                                */
                                /**
                                * [tFileOutputDelimited_1 finally ] start
                                */
                                currentComponent = "tFileOutputDelimited_1";
                                if (resourceMap.get("finish_tFileOutputDelimited_1") == null) \{\\
                                        java.io.Writer outtFileOutputDelimited_1 = (java.io.Writer)
resource Map
                                                        .get("out_tFileOutputDelimited_1");
                                        if (outtFileOutputDelimited_1 != null) {
                                                outtFileOutputDelimited_1.flush();
                                                outtFileOutputDelimited_1.close();
                                        }
                                }
                                /**
                                * [tFileOutputDelimited_1 finally ] stop
                                */
                                /**
                                * [tLogRow_2 finally ] start
                                */
```

```
currentComponent = "tLogRow_2";
                               /**
                               * [tLogRow_2 finally ] stop
                               */
                       } catch (java.lang.Exception e) {
                               // ignore
                       } catch (java.lang.Error error) {
                               // ignore
                       }
                       resourceMap = null;
               }
               globalMap.put("tFileInputDelimited_1_SUBPROCESS_STATE", 1);
       }
       public static class row4Struct implements
routines.system.IPersistableComparableLookupRow<row4Struct> {
               final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
               static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
               protected static final int DEFAULT_HASHCODE = 1;
               protected static final int PRIME = 31;
               protected int hashCode = DEFAULT_HASHCODE;
               public boolean hashCodeDirty = true;
               public String loopKey;
               public Integer work_year;
```

```
public Integer getWork_year() {
        return this.work_year;
}
public String experience_level;
public String getExperience_level() {
        return this.experience_level;
}
public String employment_type;
public String getEmployment_type() {
        return this.employment_type;
}
public String job_title;
public String getJob_title() {
        return this.job_title;
}
public Integer salary;
public Integer getSalary() {
        return this.salary;
}
public String salary_currency;
public String getSalary_currency() {
```

```
return this.salary_currency;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
public Character company_size;
public Character getCompany_size() {
        return this.company_size;
```

```
}
                 @Override
                 public int hashCode() {
                         if (this.hashCodeDirty) {
                                 final int prime = PRIME;
                                 int result = DEFAULT_HASHCODE;
                                 result = prime * result + ((this.work_year == null) ? 0 :
this.work_year.hashCode());
                                 result = prime * result + ((this.experience_level == null) ? 0 :
this.experience_level.hashCode());
                                 result = prime * result + ((this.employment_type == null) ? 0 :
this.employment_type.hashCode());
                                 result = prime * result + ((this.job_title == null) ? 0 :
this.job_title.hashCode());
                                 result = prime * result + ((this.salary == null) ? 0 :
this.salary.hashCode());
                                 result = prime * result + ((this.salary_currency == null) ? 0 :
this.salary_currency.hashCode());
                                 result = prime * result + ((this.salary_in_usd == null) ? 0 :
this.salary_in_usd.hashCode());
                                 result = prime * result + ((this.employee_residence == null) ? 0 :
this.employee_residence.hashCode());
                                 result = prime * result + ((this.remote_ratio == null) ? 0 :
this.remote_ratio.hashCode());
```

```
result = prime * result + ((this.company_location == null) ? 0 :
this.company_location.hashCode());
                                 result = prime * result + ((this.company_size == null) ? 0 :
this.company_size.hashCode());
                                 this.hashCode = result;
                                 this.hashCodeDirty = false;
                         }
                         return this.hashCode;
                }
                 @Override
                public boolean equals(Object obj) {
                         if (this == obj)
                                 return true;
                         if (obj == null)
                                 return false;
                         if (getClass() != obj.getClass())
                                 return false;
                         final row4Struct other = (row4Struct) obj;
                         if (this.work_year == null) {
                                 if (other.work_year != null)
                                          return false;
                         } else if (!this.work_year.equals(other.work_year))
                                 return false;
                         if (this.experience_level == null) {
```

```
if (other.experience_level != null)
                 return false;
} else if (!this.experience_level.equals(other.experience_level))
        return false;
if (this.employment_type == null) {
        if (other.employment_type != null)
                 return false;
} else if (!this.employment_type.equals(other.employment_type))
        return false;
if (this.job_title == null) {
        if (other.job_title != null)
                 return false;
} else if (!this.job_title.equals(other.job_title))
        return false;
if (this.salary == null) {
        if (other.salary != null)
                 return false;
} else if (!this.salary.equals(other.salary))
        return false;
```

```
if (this.salary_currency == null) {
        if (other.salary_currency != null)
                 return false;
} else if (!this.salary_currency.equals(other.salary_currency))
        return false;
if (this.salary_in_usd == null) {
        if (other.salary_in_usd != null)
                 return false;
} else if (!this.salary_in_usd.equals(other.salary_in_usd))
        return false;
if (this.employee_residence == null) {
        if (other.employee_residence != null)
                 return false;
} else if (!this.employee_residence.equals(other.employee_residence))
        return false;
if (this.remote_ratio == null) {
        if (other.remote_ratio != null)
                 return false;
} else if (!this.remote_ratio.equals(other.remote_ratio))
        return false;
```

```
if (other.company_location != null)
                        return false;
        } else if (!this.company_location.equals(other.company_location))
                return false;
        if (this.company_size == null) {
                if (other.company_size != null)
                        return false;
        } else if (!this.company_size.equals(other.company_size))
                return false;
        return true;
}
public void copyDataTo(row4Struct other) {
        other.work_year = this.work_year;
        other.experience_level = this.experience_level;
        other.employment_type = this.employment_type;
        other.job_title = this.job_title;
        other.salary = this.salary;
        other.salary_currency = this.salary_currency;
        other.salary_in_usd = this.salary_in_usd;
        other.employee_residence = this.employee_residence;
        other.remote_ratio = this.remote_ratio;
```

if (this.company_location == null) {

```
other.company_location = this.company_location;
        other.company_size = this.company_size;
}
public void copyKeysDataTo(row4Struct other) {
        other.work_year = this.work_year;
        other.experience level = this.experience level;
        other.employment_type = this.employment_type;
        other.job_title = this.job_title;
        other.salary = this.salary;
        other.salary_currency = this.salary_currency;
        other.salary_in_usd = this.salary_in_usd;
        other.employee_residence = this.employee_residence;
        other.remote_ratio = this.remote_ratio;
        other.company_location = this.company_location;
        other.company_size = this.company_size;
}
private Integer readInteger(ObjectInputStream dis) throws IOException {
        Integer intReturn;
        int length = 0;
        length = dis.readByte();
        if (length == -1) {
                intReturn = null;
        } else {
                intReturn = dis.readInt();
        }
        return intReturn;
```

```
}
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                        Integer intReturn;
                        int length = 0;
                        length = dis.readByte();
                        if (length == -1) {
                                 intReturn = null;
                        } else {
                                 intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                        if (intNum == null) {
                                 dos.writeByte(-1);
                        } else {
                                 dos.writeByte(0);
                                 dos.writeInt(intNum);
                        }
                }
                private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                        if (intNum == null) {
                                 marshaller.writeByte(-1);
                        } else {
```

marshaller.writeByte(0);

marshaller.writeInt(intNum);

```
}
               }
               private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
               private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
```

```
if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String (common Byte Array\_LOCAL\_PROJECT\_etl\_project\_process, 0, length, utf8 Charset);
                       }
                       return strReturn;
                }
                private void writeString(String str, ObjectOutputStream dos) throws IOException {
                       if (str == null) {
                               dos.writeInt(-1);
                       } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                dos.writeInt(byteArray.length);
                               dos.write(byteArray);
                       }
               }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
```

```
if (str == null) {
                                 marshaller.writeInt(-1);
                        } else {
                                 byte[] byteArray = str.getBytes(utf8Charset);
                                 marshaller.writeInt(byteArray.length);
                                 marshaller.write(byteArray);
                        }
                }
                public void readKeysData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                 try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
                                         this.experience_level = readString(dis);
                                         this.employment_type = readString(dis);
                                         this.job_title = readString(dis);
                                         this.salary = readInteger(dis);
                                         this.salary_currency = readString(dis);
                                         this.salary_in_usd = readInteger(dis);
```

```
this.remote_ratio = readInteger(dis);
                                        this.company_location = readString(dis);
                                        length = dis.readByte();
                                        if (length == -1) {
                                                this.company_size = null;
                                        } else {
                                                this.company_size = dis.readChar();
                                        }
                                } catch (IOException e) {
                                        throw new RuntimeException(e);
                                }
                        }
               }
                public void readKeysData(org.jboss.marshalling.Unmarshaller dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                        int length = 0;
```

this.employee_residence = readString(dis);

```
this.work_year = readInteger(dis);
        this.experience_level = readString(dis);
        this.employment_type = readString(dis);
        this.job_title = readString(dis);
        this.salary = readInteger(dis);
        this.salary_currency = readString(dis);
        this.salary_in_usd = readInteger(dis);
        this.employee_residence = readString(dis);
        this.remote_ratio = readInteger(dis);
        this.company_location = readString(dis);
        length = dis.readByte();
        if (length == -1) {
                this.company_size = null;
        } else {
                this.company_size = dis.readChar();
        }
} catch (IOException e) {
        throw new RuntimeException(e);
```

```
}
        }
}
public void writeKeysData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary, dos);
                // String
```

```
writeString(this.salary_currency, dos);
        // Integer
        writeInteger(this.salary_in_usd, dos);
        // String
        writeString(this.employee_residence, dos);
        // Integer
        writeInteger(this.remote_ratio, dos);
        // String
        writeString(this.company_location, dos);
        // Character
        if (this.company_size == null) {
                dos.writeByte(-1);
        } else {
                dos.writeByte(0);
                dos.writeChar(this.company_size);
       }
} catch (IOException e) {
        throw new RuntimeException(e);
```

}

```
}
public void writeKeysData(org.jboss.marshalling.Marshaller dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary, dos);
                // String
                writeString(this.salary_currency, dos);
```

// Integer

```
writeInteger(this.salary_in_usd, dos);
                // String
                writeString(this.employee_residence, dos);
                // Integer
                writeInteger(this.remote_ratio, dos);
                // String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
 * Fill Values data by reading ObjectInputStream.
```

```
*/
                public void readValuesData(DataInputStream dis, ObjectInputStream ois) {
                        try {
                                 int length = 0;
                        }
                        finally {
                        }
                }
                public\ void\ read Values Data (Data Input Stream\ dis,\ org. jboss. marshalling. Unmarshaller
objectIn) {
                        try {
                                 int length = 0;
                        }
                        finally {
                        }
                }
                /**
                 * Return a byte array which represents Values data.
                 */
                public void writeValuesData(DataOutputStream dos, ObjectOutputStream oos) {
                        try {
```

```
} finally {
                       }
               }
                public void writeValuesData(DataOutputStream dos, org.jboss.marshalling.Marshaller
objectOut) {
                       try {
                       } finally {
                       }
               }
                public boolean supportMarshaller() {
                       return true;
               }
               public String toString() {
                       StringBuilder sb = new StringBuilder();
                       sb.append(super.toString());
                       sb.append("[");
                       sb.append("work_year=" + String.valueOf(work_year));
                       sb.append(",experience_level=" + experience_level);
                       sb.append(",employment_type=" + employment_type);
                       sb.append(",job_title=" + job_title);
                       sb.append(",salary=" + String.valueOf(salary));
                       sb.append(",salary_currency=" + salary_currency);
                       sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
                       sb.append(",employee_residence=" + employee_residence);
                       sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
```

```
sb.append(",company_location=" + company_location);
                       sb.append(",company_size=" + String.valueOf(company_size));
                       sb.append("]");
                       return sb.toString();
               }
               /**
                * Compare keys
                */
                public int compareTo(row4Struct other) {
                       int returnValue = -1;
                       returnValue = checkNullsAndCompare(this.work_year, other.work_year);
                       if (returnValue != 0) {
                               return returnValue;
                       }
                       returnValue = checkNullsAndCompare(this.experience_level,
other.experience_level);
                       if (returnValue != 0) {
                               return returnValue;
                       }
                       returnValue = checkNullsAndCompare(this.employment_type,
other.employment_type);
                       if (returnValue != 0) {
                               return returnValue;
                       }
                       returnValue = checkNullsAndCompare(this.job_title, other.job_title);
```

```
if (returnValue != 0) {
                                return returnValue;
                        }
                        returnValue = checkNullsAndCompare(this.salary, other.salary);
                        if (returnValue != 0) {
                                return return Value;
                        }
                        returnValue = checkNullsAndCompare(this.salary_currency,
other.salary_currency);
                        if (returnValue != 0) {
                                return returnValue;
                        }
                        returnValue = checkNullsAndCompare(this.salary_in_usd,
other.salary_in_usd);
                        if (returnValue != 0) {
                                return returnValue;
                        }
                        returnValue = checkNullsAndCompare(this.employee_residence,
other.employee_residence);
                        if (returnValue != 0) {
                                return return Value;
                        }
                        returnValue = checkNullsAndCompare(this.remote_ratio,
other.remote_ratio);
                        if (returnValue != 0) {
                                return returnValue;
                        }
```

```
returnValue = checkNullsAndCompare(this.company_location,
other.company_location);
                        if (returnValue != 0) {
                                return return Value;
                        }
                        returnValue = checkNullsAndCompare(this.company_size,
other.company_size);
                        if (returnValue != 0) {
                                return returnValue;
                        }
                        return returnValue;
                }
                private int checkNullsAndCompare(Object object1, Object object2) {
                        int returnValue = 0;
                        if (object1 instanceof Comparable && object2 instanceof Comparable) {
                                returnValue = ((Comparable) object1).compareTo(object2);
                        } else if (object1 != null && object2 != null) {
                                returnValue = compareStrings(object1.toString(), object2.toString());
                        } else if (object1 == null && object2 != null) {
                                returnValue = 1;
                        } else if (object1 != null && object2 == null) {
                                returnValue = -1;
                        } else {
                                returnValue = 0;
                        }
                        return returnValue;
                }
```

```
private int compareStrings(String string1, String string2) {
                       return string1.compareTo(string2);
                }
       }
        public static class row2Struct implements routines.system.IPersistableRow<row2Struct> {
               final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
               static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
                public Integer work_year;
                public Integer getWork_year() {
                       return this.work_year;
               }
                public String experience_level;
                public String getExperience_level() {
                       return this.experience_level;
               }
                public String employment_type;
                public String getEmployment_type() {
                       return this.employment_type;
                }
                public String job_title;
```

```
public String getJob_title() {
        return this.job_title;
}
public Integer salary;
public Integer getSalary() {
        return this.salary;
}
public String salary_currency;
public String getSalary_currency() {
        return this.salary_currency;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
```

```
return this.remote_ratio;
                }
                public String company_location;
                public String getCompany_location() {
                        return this.company_location;
                }
                public Character company_size;
                public Character getCompany_size() {
                        return this.company_size;
                }
                private Integer readInteger(ObjectInputStream dis) throws IOException {
                        Integer intReturn;
                        int length = 0;
                        length = dis.readByte();
                        if (length == -1) {
                                intReturn = null;
                        } else {
                                intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                        Integer intReturn;
```

public Integer getRemote_ratio() {

```
int length = 0;
                        length = dis.readByte();
                        if (length == -1) {
                                 intReturn = null;
                        } else {
                                intReturn = dis.readInt();
                        }
                        return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                        if (intNum == null) {
                                 dos.writeByte(-1);
                        } else {
                                 dos.writeByte(0);
                                 dos.writeInt(intNum);
                        }
                }
                private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller
marshaller) throws IOException {
                        if (intNum == null) {
                                 marshaller.writeByte(-1);
                        } else {
                                 marshaller.writeByte(0);
                                 marshaller.writeInt(intNum);
                        }
                }
                private String readString(ObjectInputStream dis) throws IOException {
                        String strReturn = null;
```

```
int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String (common Byte Array\_LOCAL\_PROJECT\_etl\_project\_process, 0, length, utf8 Charset);
                       }
                       return strReturn;
               }
               private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
```

```
if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
                private void writeString(String str, ObjectOutputStream dos) throws IOException {
                       if (str == null) {
                               dos.writeInt(-1);
                       } else {
                               byte[] byteArray = str.getBytes(utf8Charset);
                               dos.writeInt(byteArray.length);
                               dos.write(byteArray);
                       }
               }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
                       if (str == null) {
                               marshaller.writeInt(-1);
                       } else {
                               byte[] byteArray = str.getBytes(utf8Charset);
```

```
marshaller.writeInt(byteArray.length);
                                 marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized \ (common ByteArrayLock\_LOCAL\_PROJECT\_etl\_project\_process)
{
                                 try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
                                         this.experience_level = readString(dis);
                                         this.employment_type = readString(dis);
                                         this.job_title = readString(dis);
                                         this.salary = readInteger(dis);
                                         this.salary_currency = readString(dis);
                                         this.salary_in_usd = readInteger(dis);
                                         this.employee_residence = readString(dis);
                                         this.remote_ratio = readInteger(dis);
```

```
length = dis.readByte();
                                        if (length == -1) {
                                                this.company_size = null;
                                        } else {
                                                this.company_size = dis.readChar();
                                        }
                                } catch (IOException e) {
                                        throw new RuntimeException(e);
                                }
                        }
                }
                public void readData(org.jboss.marshalling.Unmarshaller dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                        int length = 0;
                                        this.work_year = readInteger(dis);
                                        this.experience_level = readString(dis);
```

this.company_location = readString(dis);

```
this.employment_type = readString(dis);
        this.job_title = readString(dis);
        this.salary = readInteger(dis);
        this.salary_currency = readString(dis);
        this.salary_in_usd = readInteger(dis);
        this.employee_residence = readString(dis);
        this.remote_ratio = readInteger(dis);
        this.company_location = readString(dis);
        length = dis.readByte();
        if (length == -1) {
                this.company_size = null;
        } else {
                this.company_size = dis.readChar();
        }
} catch (IOException e) {
        throw new RuntimeException(e);
}
```

}

```
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary, dos);
                // String
                writeString(this.salary_currency, dos);
```

// Integer

```
// String
                writeString(this.employee_residence, dos);
                // Integer
                writeInteger(this.remote_ratio, dos);
                // String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public void writeData(org.jboss.marshalling.Marshaller dos) {
        try {
```

writeInteger(this.salary_in_usd, dos);

```
// Integer
writeInteger(this.work_year, dos);
// String
writeString(this.experience_level, dos);
// String
writeString(this.employment_type, dos);
// String
writeString(this.job_title, dos);
// Integer
writeInteger(this.salary, dos);
// String
writeString(this.salary_currency, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
```

```
// Integer
                writeInteger(this.remote_ratio, dos);
                // String
                writeString(this.company_location, dos);
                // Character
                if (this.company_size == null) {
                        dos.writeByte(-1);
                } else {
                        dos.writeByte(0);
                        dos.writeChar(this.company_size);
                }
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public String toString() {
        StringBuilder sb = new StringBuilder();
        sb.append(super.toString());
        sb.append("[");
        sb.append("work_year=" + String.valueOf(work_year));
```

writeString(this.employee_residence, dos);

```
sb.append(",experience_level=" + experience_level);
       sb.append(",employment_type=" + employment_type);
       sb.append(",job_title=" + job_title);
       sb.append(",salary=" + String.valueOf(salary));
       sb.append(",salary_currency=" + salary_currency);
       sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
       sb.append(",employee_residence=" + employee_residence);
       sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
       sb.append(",company_location=" + company_location);
       sb.append(",company_size=" + String.valueOf(company_size));
       sb.append("]");
       return sb.toString();
}
/**
* Compare keys
*/
public int compareTo(row2Struct other) {
       int returnValue = -1;
       return return Value;
}
private int checkNullsAndCompare(Object object1, Object object2) {
       int returnValue = 0;
       if (object1 instanceof Comparable && object2 instanceof Comparable) {
               returnValue = ((Comparable) object1).compareTo(object2);
       } else if (object1 != null && object2 != null) {
               returnValue = compareStrings(object1.toString(), object2.toString());
```

```
returnValue = 1;
                        } else if (object1 != null && object2 == null) {
                                returnValue = -1;
                        } else {
                                returnValue = 0;
                        }
                        return returnValue;
                }
                private int compareStrings(String string1, String string2) {
                        return string1.compareTo(string2);
                }
        }
        public static class row1Struct implements routines.system.IPersistableRow<row1Struct> {
                final static byte[] commonByteArrayLock_LOCAL_PROJECT_etl_project_process =
new byte[0];
                static byte[] commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[0];
                public Integer work_year;
                public Integer getWork_year() {
                        return this.work_year;
                }
                public String experience_level;
                public String getExperience_level() {
```

} else if (object1 == null && object2 != null) {

```
return this.experience_level;
}
public String employment_type;
public String getEmployment_type() {
        return this.employment_type;
}
public String job_title;
public String getJob_title() {
        return this.job_title;
}
public Integer salary;
public Integer getSalary() {
        return this.salary;
}
public String salary_currency;
public String getSalary_currency() {
        return this.salary_currency;
}
public Integer salary_in_usd;
public Integer getSalary_in_usd() {
        return this.salary_in_usd;
```

```
}
public String employee_residence;
public String getEmployee_residence() {
        return this.employee_residence;
}
public Integer remote_ratio;
public Integer getRemote_ratio() {
        return this.remote_ratio;
}
public String company_location;
public String getCompany_location() {
        return this.company_location;
}
public Character company_size;
public Character getCompany_size() {
        return this.company_size;
}
private Integer readInteger(ObjectInputStream dis) throws IOException {
        Integer intReturn;
        int length = 0;
        length = dis.readByte();
        if (length == -1) {
```

```
intReturn = null;
                         } else {
                                 intReturn = dis.readInt();
                         }
                         return intReturn;
                }
                private Integer readInteger(org.jboss.marshalling.Unmarshaller dis) throws
IOException {
                         Integer intReturn;
                         int length = 0;
                         length = dis.readByte();
                         if (length == -1) {
                                 intReturn = null;
                         } else {
                                 intReturn = dis.readInt();
                        }
                         return intReturn;
                }
                private void writeInteger(Integer intNum, ObjectOutputStream dos) throws
IOException {
                         if (intNum == null) {
                                 dos.writeByte(-1);
                         } else {
                                 dos.writeByte(0);
                                 dos.writeInt(intNum);
                         }
                }
```

private void writeInteger(Integer intNum, org.jboss.marshalling.Marshaller marshaller) throws IOException {

```
marshaller.writeByte(-1);
                       } else {
                               marshaller.writeByte(0);
                               marshaller.writeInt(intNum);
                       }
               }
               private String readString(ObjectInputStream dis) throws IOException {
                       String strReturn = null;
                       int length = 0;
                       length = dis.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
       commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
       dis.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
```

if (intNum == null) {

```
private String readString(org.jboss.marshalling.Unmarshaller unmarshaller) throws
IOException {
                       String strReturn = null;
                       int length = 0;
                       length = unmarshaller.readInt();
                       if (length == -1) {
                               strReturn = null;
                       } else {
                               if (length >
commonByteArray_LOCAL_PROJECT_etl_project_process.length) {
                                       if (length < 1024 &&
commonByteArray_LOCAL_PROJECT_etl_project_process.length == 0) {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[1024];
                                       } else {
        commonByteArray_LOCAL_PROJECT_etl_project_process = new byte[2 * length];
                                       }
                               }
        unmarshaller.readFully(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length);
                               strReturn = new
String(commonByteArray_LOCAL_PROJECT_etl_project_process, 0, length, utf8Charset);
                       }
                       return strReturn;
               }
               private void writeString(String str, ObjectOutputStream dos) throws IOException {
                       if (str == null) {
                               dos.writeInt(-1);
                       } else {
                               byte[] byteArray = str.getBytes(utf8Charset);
                               dos.writeInt(byteArray.length);
```

```
dos.write(byteArray);
                        }
                }
                private void writeString(String str, org.jboss.marshalling.Marshaller marshaller)
throws IOException {
                        if (str == null) {
                                marshaller.writeInt(-1);
                        } else {
                                byte[] byteArray = str.getBytes(utf8Charset);
                                marshaller.writeInt(byteArray.length);
                                marshaller.write(byteArray);
                        }
                }
                public void readData(ObjectInputStream dis) {
                        synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
{
                                try {
                                         int length = 0;
                                         this.work_year = readInteger(dis);
                                         this.experience_level = readString(dis);
                                         this.employment_type = readString(dis);
                                         this.job_title = readString(dis);
```

```
this.salary_currency = readString(dis);
                        this.salary_in_usd = readInteger(dis);
                        this.employee_residence = readString(dis);
                        this.remote_ratio = readInteger(dis);
                        this.company_location = readString(dis);
                        length = dis.readByte();
                        if (length == -1) {
                                this.company_size = null;
                        } else {
                                this.company_size = dis.readChar();
                        }
                } catch (IOException e) {
                        throw new RuntimeException(e);
                }
        }
}
public void readData(org.jboss.marshalling.Unmarshaller dis) {
```

this.salary = readInteger(dis);

```
synchronized (commonByteArrayLock_LOCAL_PROJECT_etl_project_process)
        try {
                int length = 0;
                this.work_year = readInteger(dis);
                this.experience_level = readString(dis);
                this.employment_type = readString(dis);
                this.job_title = readString(dis);
                this.salary = readInteger(dis);
                this.salary_currency = readString(dis);
                this.salary_in_usd = readInteger(dis);
                this.employee_residence = readString(dis);
                this.remote_ratio = readInteger(dis);
                this.company_location = readString(dis);
                length = dis.readByte();
                if (length == -1) {
                        this.company_size = null;
                } else {
```

{

```
this.company_size = dis.readChar();
                        }
                } catch (IOException e) {
                        throw new RuntimeException(e);
                }
        }
}
public void writeData(ObjectOutputStream dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
```

```
// Integer
writeInteger(this.salary, dos);
// String
writeString(this.salary_currency, dos);
// Integer
writeInteger(this.salary_in_usd, dos);
// String
writeString(this.employee_residence, dos);
// Integer
writeInteger(this.remote_ratio, dos);
// String
writeString(this.company_location, dos);
// Character
if (this.company_size == null) {
        dos.writeByte(-1);
} else {
        dos.writeByte(0);
        dos.writeChar(this.company_size);
```

```
}
        } catch (IOException e) {
                throw new RuntimeException(e);
        }
}
public void writeData(org.jboss.marshalling.Marshaller dos) {
        try {
                // Integer
                writeInteger(this.work_year, dos);
                // String
                writeString(this.experience_level, dos);
                // String
                writeString(this.employment_type, dos);
                // String
                writeString(this.job_title, dos);
                // Integer
                writeInteger(this.salary, dos);
```

```
// String
        writeString(this.salary_currency, dos);
        // Integer
        writeInteger(this.salary_in_usd, dos);
        // String
        writeString(this.employee_residence, dos);
        // Integer
        writeInteger(this.remote_ratio, dos);
        // String
        writeString(this.company_location, dos);
        // Character
        if (this.company_size == null) {
                dos.writeByte(-1);
        } else {
                dos.writeByte(0);
                dos.writeChar(this.company_size);
        }
} catch (IOException e) {
        throw new RuntimeException(e);
```

```
}
}
public String toString() {
       StringBuilder sb = new StringBuilder();
        sb.append(super.toString());
       sb.append("[");
        sb.append("work_year=" + String.valueOf(work_year));
        sb.append(",experience_level=" + experience_level);
        sb.append(",employment_type=" + employment_type);
        sb.append(",job_title=" + job_title);
        sb.append(",salary=" + String.valueOf(salary));
        sb.append(",salary_currency=" + salary_currency);
        sb.append(",salary_in_usd=" + String.valueOf(salary_in_usd));
        sb.append(",employee_residence=" + employee_residence);
        sb.append(",remote_ratio=" + String.valueOf(remote_ratio));
        sb.append(",company_location=" + company_location);
       sb.append(",company_size=" + String.valueOf(company_size));
       sb.append("]");
       return sb.toString();
}
/**
* Compare keys
*/
public int compareTo(row1Struct other) {
       int returnValue = -1;
```

```
return return Value;
                }
                private int checkNullsAndCompare(Object object1, Object object2) {
                        int returnValue = 0;
                        if (object1 instanceof Comparable && object2 instanceof Comparable) {
                                 returnValue = ((Comparable) object1).compareTo(object2);
                        } else if (object1 != null && object2 != null) {
                                 returnValue = compareStrings(object1.toString(), object2.toString());
                        } else if (object1 == null && object2 != null) {
                                returnValue = 1;
                        } else if (object1 != null && object2 == null) {
                                returnValue = -1;
                        } else {
                                returnValue = 0;
                        }
                        return return Value;
                }
                private int compareStrings(String string1, String string2) {
                        return string1.compareTo(string2);
                }
        public void tFileInputJSON_1Process(final java.util.Map<String, Object> globalMap) throws
TalendException {
```

globalMap.put("tFileInputJSON_1_SUBPROCESS_STATE", 0);

}

```
final boolean execStat = this.execStat;
               String iterateId = "";
               String currentComponent = "";
               java.util.Map<String, Object> resourceMap = new java.util.HashMap<String,
Object>();
               try {
                       // TDI-39566 avoid throwing an useless Exception
                       boolean resumeIt = true;
                       if (globalResumeTicket == false && resumeEntryMethodName != null) {
                               String currentMethodName = new
java.lang.Exception().getStackTrace()[0].getMethodName();
                              resumeIt = resumeEntryMethodName.equals(currentMethodName);
                       }
                       if (resumeIt | | globalResumeTicket) { // start the resume
                               globalResumeTicket = true;
                               row1Struct row1 = new row1Struct();
                              row1Struct row2 = row1;
                              row1Struct row4 = row1;
                               /**
                               * [tAdvancedHash_row4 begin ] start
                               */
                               ok_Hash.put("tAdvancedHash_row4", false);
                               start_Hash.put("tAdvancedHash_row4", System.currentTimeMillis());
                               currentComponent = "tAdvancedHash_row4";
```

```
int tos_count_tAdvancedHash_row4 = 0;
                                                                                                   // connection name:row4
                                                                                                   // source node:tFileOutputExcel_1 - inputs:(row2)
outputs:(row4,row4) | target
                                                                                                  // node:tAdvancedHash_row4 - inputs:(row4) outputs:()
                                                                                                  // linked node: tMap 1 - inputs:(row3,row4)
outputs:(output_sal,rejected)
                         org. talend. designer. components. lookup. common. ICommonLookup. MATCHING\_MODE
matchingModeEnum row4 =
org. talend. designer. components. lookup. common. ICommonLookup. MATCHING\_MODE. UNIQUE\_MATCHING\_MODE. UNIQUE MATCHING\_MODE. UNIQUE MATCHING MODE. UNIQU
CH;
                         org.talend.designer.components.lookup.memory.AdvancedMemoryLookup<row4Struct>
t Hash\_Lookup\_row4 = org.talend.designer.components.lookup.memory.AdvancedMemoryLookup
                         .<row4Struct>getLookup(matchingModeEnum_row4);
                                                                                                   globalMap.put("tHash_Lookup_row4", tHash_Lookup_row4);
                                                                                                   /**
                                                                                                    * [tAdvancedHash row4 begin] stop
                                                                                                     */
                                                                                                    * [tFileOutputExcel_1 begin ] start
                                                                                                     */
                                                                                                   ok_Hash.put("tFileOutputExcel_1", false);
                                                                                                   start_Hash.put("tFileOutputExcel_1", System.currentTimeMillis());
```

```
currentComponent = "tFileOutputExcel_1";
                                int tos_count_tFileOutputExcel_1 = 0;
                                int columnIndex_tFileOutputExcel_1 = 0;
                                boolean headerIsInserted_tFileOutputExcel_1 = false;
                                int nb line tFileOutputExcel 1 = 0;
                                String fileName tFileOutputExcel 1 = "C:/Program Files
(x86)/TOS_DI-8.0.1/studio/workspace/ETL_project/salaries_outfile.xls";
                               java.io.File file_tFileOutputExcel_1 = new
java.io.File(fileName_tFileOutputExcel_1);
                               boolean isFileGenerated_tFileOutputExcel_1 = true;
//create directory only if not exists
                               java.io.File parentFile_tFileOutputExcel_1 =
file_tFileOutputExcel_1.getParentFile();
                               if (parentFile_tFileOutputExcel_1 != null &&
!parentFile_tFileOutputExcel_1.exists()) {
                                       parentFile_tFileOutputExcel_1.mkdirs();
                               }
                               jxl.write.WritableWorkbook writeableWorkbook_tFileOutputExcel_1
= null;
                                jxl.write.WritableSheet writableSheet_tFileOutputExcel_1 = null;
                                jxl.WorkbookSettings workbookSettings_tFileOutputExcel_1 = new
jxl.WorkbookSettings();
                                workbookSettings_tFileOutputExcel_1.setEncoding("ISO-8859-15");
                                writeableWorkbook_tFileOutputExcel_1 = new
jxl.write.biff.WritableWorkbookImpl(
```

```
new java.io.BufferedOutputStream(new
java.io.FileOutputStream(fileName_tFileOutputExcel_1)),
                                               true, workbookSettings_tFileOutputExcel_1);
                               writableSheet tFileOutputExcel 1 =
writeableWorkbook_tFileOutputExcel_1.getSheet("Sheet1");
                               if (writableSheet_tFileOutputExcel_1 == null) {
                                       writableSheet_tFileOutputExcel_1 =
write able Workbook\_tFile Output Excel\_1. create Sheet ("Sheet1",
        writeableWorkbook_tFileOutputExcel_1.getNumberOfSheets());
                               }
                               // modif start
                               int startRowNum_tFileOutputExcel_1 =
writableSheet_tFileOutputExcel_1.getRows();
                               // modif end
                               int[] fitWidth_tFileOutputExcel_1 = new int[11];
                               for (int i_tFileOutputExcel_1 = 0; i_tFileOutputExcel_1 < 11;
i_tFileOutputExcel_1++) {
                                       int fitCellViewSize_tFileOutputExcel_1 =
writableSheet_tFileOutputExcel_1
        .getColumnView(i_tFileOutputExcel_1).getSize();
                                       fitWidth_tFileOutputExcel_1[i_tFileOutputExcel_1] =
fitCellViewSize_tFileOutputExcel_1 / 256;
                                       if (fitCellViewSize_tFileOutputExcel_1 % 256 != 0) {
                                               fitWidth_tFileOutputExcel_1[i_tFileOutputExcel_1]
+= 1;
                                       }
                               }
                               if (startRowNum_tFileOutputExcel_1 == 0) {
                                       // modif end
```

```
// modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(0,
nb_line_tFileOutputExcel_1, "work_year"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[0] =
fitWidth_tFileOutputExcel_1[0] > 9 ? fitWidth_tFileOutputExcel_1[0]
                                                        : 9;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(1,
nb_line_tFileOutputExcel_1, "experience_level"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[1] =
fitWidth_tFileOutputExcel_1[1] > 16
                                                        ? fitWidth_tFileOutputExcel_1[1]
                                                        : 16;
                                        // modif start
                                        writable Sheet\_tFileOutput Excel\_1
                                                        .addCell(new jxl.write.Label(2,
nb_line_tFileOutputExcel_1, "employment_type"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[2] =
fitWidth_tFileOutputExcel_1[2] > 15
                                                        ? fitWidth_tFileOutputExcel_1[2]
                                                        : 15;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(3,
nb_line_tFileOutputExcel_1, "job_title"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[3] =
fitWidth_tFileOutputExcel_1[3] > 9 ? fitWidth_tFileOutputExcel_1[3]
```

: 9;

```
// modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(4,
nb_line_tFileOutputExcel_1, "salary"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[4] =
fitWidth_tFileOutputExcel_1[4] > 6 ? fitWidth_tFileOutputExcel_1[4]
                                                        : 6;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(5,
nb_line_tFileOutputExcel_1, "salary_currency"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[5] =
fitWidth_tFileOutputExcel_1[5] > 15
                                                        ? fitWidth_tFileOutputExcel_1[5]
                                                        : 15;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(6,
nb_line_tFileOutputExcel_1, "salary_in_usd"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[6] =
fitWidth_tFileOutputExcel_1[6] > 13
                                                        ? fitWidth_tFileOutputExcel_1[6]
                                                        : 13;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(7,
nb_line_tFileOutputExcel_1, "employee_residence"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[7] =
fitWidth_tFileOutputExcel_1[7] > 18
                                                        ? fitWidth_tFileOutputExcel_1[7]
```

```
: 18;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                        .addCell(new jxl.write.Label(8,
nb line tFileOutputExcel 1, "remote ratio"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[8] =
fitWidth_tFileOutputExcel_1[8] > 12
                                                       ? fitWidth_tFileOutputExcel_1[8]
                                                       : 12;
                                        // modif start
                                        writableSheet_tFileOutputExcel_1
                                                       .addCell(new jxl.write.Label(9,
nb_line_tFileOutputExcel_1, "company_location"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[9] =
fitWidth_tFileOutputExcel_1[9] > 16
                                                       ? fitWidth_tFileOutputExcel_1[9]
                                                       : 16;
                                        // modif start
                                        writable Sheet\_tFileOutput Excel\_1
                                                       .addCell(new jxl.write.Label(10,
nb_line_tFileOutputExcel_1, "company_size"));
                                        // modif end
                                        fitWidth_tFileOutputExcel_1[10] =
fitWidth_tFileOutputExcel_1[10] > 12
                                                       ? fitWidth_tFileOutputExcel_1[10]
                                                       : 12;
                                        nb_line_tFileOutputExcel_1++;
                                        headerIsInserted_tFileOutputExcel_1 = true;
                                }
```

```
*/
                               /**
                                * [tLogRow_1 begin ] start
                                */
                               ok_Hash.put("tLogRow_1", false);
                               start_Hash.put("tLogRow_1", System.currentTimeMillis());
                               currentComponent = "tLogRow_1";
                               int tos_count_tLogRow_1 = 0;
                               class Util_tLogRow_1 {
                                       String[] des_top = { ".", ".", "-", "+" };
                                       String[] des_head = { "|=", "=|", "-", "+" };
                                       String[] des_bottom = { "'", "'", "-", "+" };
                                       String name = "";
                                       java.util.List<String[]> list = new
java.util.ArrayList<String[]>();
                                       int[] colLengths = new int[11];
```

* [tFileOutputExcel_1 begin] stop

```
public void addRow(String[] row) {
                                                  for (int i = 0; i < 11; i++) {
                                                           if (row[i] != null) {
                                                                    colLengths[i] =
Math.max(colLengths[i], row[i].length());
                                                           }
                                                  }
                                                  list.add(row);
                                          }
                                          public void setTableName(String name) {
                                                  this.name = name;
                                          }
                                          public StringBuilder format() {
                                                  StringBuilder sb = new StringBuilder();
                                                  sb.append(print(des_top));
                                                  int totals = 0;
                                                  for (int i = 0; i < colLengths.length; i++) {
                                                           totals = totals + colLengths[i];
                                                  }
                                                  // name
                                                  sb.append("|");
                                                  int k = 0;
                                                  for (k = 0; k < (totals + 10 - name.length()) / 2; k++) {
```

```
sb.append(' ');
                                                }
                                                 sb.append(name);
                                                 for (int i = 0; i < totals + 10 - name.length() - k; <math>i++) {
                                                         sb.append(' ');
                                                }
                                                 sb.append("|\n");
                                                 // head and rows
                                                 sb.append(print(des_head));
                                                 for (int i = 0; i < list.size(); i++) {
                                                         String[] row = list.get(i);
                                                         java.util.Formatter formatter = new
java.util.Formatter(new StringBuilder());
                                                         StringBuilder sbformat = new StringBuilder();
                                                         sbformat.append("|%1$-");
                                                         sbformat.append(colLengths[0]);
                                                         sbformat.append("s");
                                                         sbformat.append("|%2$-");
                                                         sbformat.append(colLengths[1]);
                                                         sbformat.append("s");
                                                         sbformat.append("|%3$-");
                                                         sbformat.append(colLengths[2]);
                                                         sbformat.append("s");
                                                         sbformat.append("|%4$-");
```

```
sbformat.append("s");
sbformat.append("|%5$-");
sbformat.append(colLengths[4]);
sbformat.append("s");
sbformat.append("|%6$-");
sbformat.append(colLengths[5]);
sbformat.append("s");
sbformat.append("|%7$-");
sbformat.append(colLengths[6]);
sbformat.append("s");
sbformat.append("|%8$-");
sbformat.append(colLengths[7]);
sbformat.append("s");
sbformat.append("|%9$-");
sbformat.append(colLengths[8]);
sbformat.append("s");
sbformat.append("|%10$-");
sbformat.append(colLengths[9]);
sbformat.append("s");
sbformat.append("|%11$-");
sbformat.append(colLengths[10]);
sbformat.append("s");
```

sbformat.append(colLengths[3]);

```
sbformat.append("|\n");
                                                           formatter.format(sbformat.toString(),
(Object[]) row);
                                                           sb.append(formatter.toString());
                                                           if (i == 0)
                                                                    sb.append(print(des_head)); // print
the head
                                                  }
                                                  // end
                                                  sb.append(print(des_bottom));
                                                  return sb;
                                          }
                                          private StringBuilder print(String[] fillChars) {
                                                   StringBuilder sb = new StringBuilder();
                                                  // first column
                                                   sb.append(fillChars[0]);
                                                   for (int i = 0; i < colLengths[0] - fillChars[0].length() +
1; i++) {
                                                           sb.append(fillChars[2]);
                                                  }
                                                   sb.append(fillChars[3]);
                                                  for (int i = 0; i < colLengths[1] - fillChars[3].length() +
1; i++) {
                                                           sb.append(fillChars[2]);
                                                  }
                                                   sb.append(fillChars[3]);
                                                   for (int i = 0; i < colLengths[2] - fillChars[3].length() +
1; i++) {
```

```
sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[3] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[4] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[5] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[6] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[7] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
                                                    for (int i = 0; i < colLengths[8] - fillChars[3].length() +
1; i++) {
                                                             sb.append(fillChars[2]);
                                                    }
                                                    sb.append(fillChars[3]);
```

```
for (int i = 0; i < colLengths[9] - fillChars[3].length() +
1; i++) {
                                                         sb.append(fillChars[2]);
                                                 }
                                                 sb.append(fillChars[3]);
                                                 // last column
                                                 for (int i = 0; i < colLengths[10] - fillChars[1].length() +
1; i++) {
                                                         sb.append(fillChars[2]);
                                                 }
                                                 sb.append(fillChars[1]);
                                                 sb.append("\n");
                                                 return sb;
                                         }
                                         public boolean isTableEmpty() {
                                                 if (list.size() > 1)
                                                         return false;
                                                 return true;
                                         }
                                }
                                Util_tLogRow_1 util_tLogRow_1 = new Util_tLogRow_1();
                                 util_tLogRow_1.setTableName("console1");
                                util_tLogRow_1.addRow(new String[] { "work_year",
"experience_level", "employment_type", "job_title",
                                                 "salary", "salary_currency", "salary_in_usd",
"employee_residence", "remote_ratio",
                                                 "company_location", "company_size", });
                                 StringBuilder strBuffer_tLogRow_1 = null;
                                int nb_line_tLogRow_1 = 0;
```

```
* [tLogRow_1 begin ] stop
                               * [tFileInputJSON_1 begin ] start
                               */
                               ok_Hash.put("tFileInputJSON_1", false);
                               start_Hash.put("tFileInputJSON_1", System.currentTimeMillis());
                               currentComponent = "tFileInputJSON_1";
                               int tos_count_tFileInputJSON_1 = 0;
                               class JsonPathCache_tFileInputJSON_1 {
                                       final java.util.Map<String, com.jayway.jsonpath.JsonPath>
jsonPathString2compiledJsonPath = new java.util.HashMap<String, com.jayway.jsonpath.JsonPath>();
                                       public com.jayway.jsonpath.JsonPath
getCompiledJsonPath(String jsonPath) {
                                              if
(jsonPathString2compiledJsonPath.containsKey(jsonPath)) {
                                                      return
jsonPathString2compiledJsonPath.get(jsonPath);
                                              } else {
                                                      com.jayway.jsonpath.JsonPath
compiledLoopPath = com.jayway.jsonpath.JsonPath
                                                                      .compile(jsonPath);
       jsonPathString2compiledJsonPath.put(jsonPath, compiledLoopPath);
                                                      return compiledLoopPath;
```

```
}
                                      }
                               }
                               int nb_line_tFileInputJSON_1 = 0;
                               JsonPathCache_tFileInputJSON_1 jsonPathCache_tFileInputJSON_1 =
new JsonPathCache_tFileInputJSON_1();
                               String loopPath_tFileInputJSON_1 = "$[*]";
                               java.util.List<Object> resultset_tFileInputJSON_1 = new
java.util.ArrayList<Object>();
                               java.io.InputStream is_tFileInputJSON_1 = null;
                               com.jayway.jsonpath.ParseContext parseContext_tFileInputJSON_1 =
com.jayway.jsonpath.JsonPath
        .using(com.jayway.jsonpath.Configuration.defaultConfiguration());
                               Object filenameOrStream_tFileInputJSON_1 = null;
                               try {
                                      filenameOrStream_tFileInputJSON_1 = "C:/Program Files
(x86)/TOS_DI-8.0.1/studio/workspace/ETL_project/salaries.json";
                               } catch (java.lang.Exception e_tFileInputJSON_1) {
                                      globalMap.put("tFileInputJSON_1_ERROR_MESSAGE",
e_tFileInputJSON_1.getMessage());
                                      globalMap.put("tFileInputJSON_1_ERROR_MESSAGE",
e_tFileInputJSON_1.getMessage());
                                      System.err.println(e_tFileInputJSON_1.getMessage());
                               }
                               com.jayway.jsonpath.ReadContext document_tFileInputJSON_1 =
null;
                               try {
```

```
if (filenameOrStream tFileInputJSON 1 instanceof
java.io.InputStream) {
                                              is_tFileInputJSON_1 = (java.io.InputStream)
filenameOrStream_tFileInputJSON_1;
                                      } else {
                                              is_tFileInputJSON_1 = new
java.io.FileInputStream((String) filenameOrStream_tFileInputJSON_1);
                                      }
                                      document tFileInputJSON 1 =
parseContext_tFileInputJSON_1.parse(is_tFileInputJSON_1, "UTF-8");
                                      com.jayway.jsonpath.JsonPath
compiledLoopPath_tFileInputJSON_1 = jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(loopPath tFileInputJSON 1);
                                      Object result tFileInputJSON 1 =
document_tFileInputJSON_1.read(compiledLoopPath_tFileInputJSON_1,
                                                      net.minidev.json.JSONObject.class);
                                      if (result_tFileInputJSON_1 instanceof
net.minidev.json.JSONArray) {
                                              resultset_tFileInputJSON_1 =
(net.minidev.json.JSONArray) result_tFileInputJSON_1;
                                      } else {
       resultset_tFileInputJSON_1.add(result_tFileInputJSON_1);
                                      }
                               } catch (java.lang.Exception e_tFileInputJSON_1) {
                                      globalMap.put("tFileInputJSON_1_ERROR_MESSAGE",
e_tFileInputJSON_1.getMessage());
                                      globalMap.put("tFileInputJSON_1_ERROR_MESSAGE",
e_tFileInputJSON_1.getMessage());
                                      System.err.println(e_tFileInputJSON_1.getMessage());
                               } finally {
```

```
if (is_tFileInputJSON_1 != null) {
                                               is_tFileInputJSON_1.close();
                                       }
                               }
                               String jsonPath_tFileInputJSON_1 = null;
                               com.jayway.jsonpath.JsonPath compiledJsonPath_tFileInputJSON_1 =
null;
                               Object value_tFileInputJSON_1 = null;
                               Object root_tFileInputJSON_1 = null;
                               for (Object row_tFileInputJSON_1 : resultset_tFileInputJSON_1) {
                                       nb_line_tFileInputJSON_1++;
                                       row1 = null;
                                       boolean whetherReject_tFileInputJSON_1 = false;
                                       row1 = new row1Struct();
                                       try {
                                               jsonPath_tFileInputJSON_1 = "work_year";
                                               compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                      if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                              if (root_tFileInputJSON_1 == null) {
                                                                      root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
```

```
}
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                      } else {
                                                             value tFileInputJSON 1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                      if (value_tFileInputJSON_1 != null &&
!value_tFileInputJSON_1.toString().isEmpty()) {
                                                             row1.work_year =
ParserUtils.parseTo_Integer(value_tFileInputJSON_1.toString());
                                                      } else {
                                                             row1.work_year =
                                                                             null;
                                                     }
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                      row1.work_year =
                                                                     null;
                                              }
                                              jsonPath_tFileInputJSON_1 = "experience_level";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                      if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
```

```
if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                     row1.experience_level =
value_tFileInputJSON_1 == null ?
                                                                     null:
value tFileInputJSON 1.toString();
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.experience_level =
                                                                     null;
                                             }
                                              jsonPath_tFileInputJSON_1 = "employment_type";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
       .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                     if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
```

```
if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                     row1.employment_type =
value_tFileInputJSON_1 == null ?
                                                                    null:
value tFileInputJSON 1.toString();
                                             } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.employment_type =
                                                                    null;
                                             }
                                             jsonPath_tFileInputJSON_1 = "job_title";
                                             compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
       .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                             try {
                                                     if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
```

```
if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
        .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                     row1.job_title = value_tFileInputJSON_1 ==
null?
                                                                     null:
value tFileInputJSON 1.toString();
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.job_title =
                                                                     null;
                                              }
                                              jsonPath_tFileInputJSON_1 = "salary";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                     if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
```

```
if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
        .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                      } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                      }
                                                      if (value_tFileInputJSON_1 != null &&
!value_tFileInputJSON_1.toString().isEmpty()) {
                                                             row1.salary =
ParserUtils.parseTo Integer(value tFileInputJSON 1.toString());
                                                      } else {
                                                             row1.salary =
                                                                             null;
                                                      }
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                      row1.salary =
                                                                     null;
                                              }
                                              jsonPath_tFileInputJSON_1 = "salary_currency";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
```

```
try {
```

```
if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                             if (root tFileInputJSON 1 == null) {
                                                                    root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             }
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     row1.salary_currency =
value tFileInputJSON 1 == null?
                                                                    null:
value_tFileInputJSON_1.toString();
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.salary_currency =
                                                                    null;
                                             }
                                              jsonPath_tFileInputJSON_1 = "salary_in_usd";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
```

```
try {
```

```
if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                             if (root tFileInputJSON 1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             }
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                      } else {
                                                              value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                      if (value_tFileInputJSON_1 != null &&
!value_tFileInputJSON_1.toString().isEmpty()) {
                                                             row1.salary_in_usd =
ParserUtils.parseTo_Integer(value_tFileInputJSON_1.toString());
                                                      } else {
                                                             row1.salary_in_usd =
                                                                             null;
                                                      }
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                      row1.salary_in_usd =
                                                                     null;
                                              }
                                              jsonPath_tFileInputJSON_1 = "employee_residence";
```

```
compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                             try {
                                                     if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                             if (root_tFileInputJSON_1 == null) {
                                                                    root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value tFileInputJSON 1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                     row1.employee_residence =
value_tFileInputJSON_1 == null ?
                                                                    null:
value_tFileInputJSON_1.toString();
                                             } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.employee_residence =
                                                                     null;
                                             }
                                             jsonPath_tFileInputJSON_1 = "remote_ratio";
```

```
compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                      if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                             if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
        .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                      } else {
                                                             value tFileInputJSON 1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                      if (value_tFileInputJSON_1 != null &&
!value_tFileInputJSON_1.toString().isEmpty()) {
                                                             row1.remote_ratio =
ParserUtils.parseTo_Integer(value_tFileInputJSON_1.toString());
                                                      } else {
                                                             row1.remote_ratio =
                                                                             null;
                                                     }
                                              } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                      row1.remote_ratio =
```

```
null;
                                             }
                                             jsonPath_tFileInputJSON_1 = "company_location";
                                             compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
       .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                             try {
                                                     if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                             if (root_tFileInputJSON_1 == null) {
                                                                    root_tFileInputJSON_1 =
document_tFileInputJSON_1
       .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                     } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                     }
                                                     row1.company_location =
value_tFileInputJSON_1 == null ?
                                                                    null:
value_tFileInputJSON_1.toString();
                                             } catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.company_location =
```

```
null;
                                              }
                                              jsonPath_tFileInputJSON_1 = "company_size";
                                              compiledJsonPath_tFileInputJSON_1 =
jsonPathCache_tFileInputJSON_1
        .getCompiledJsonPath(jsonPath_tFileInputJSON_1);
                                              try {
                                                      if
(jsonPath_tFileInputJSON_1.startsWith("$")) {
                                                              if (root_tFileInputJSON_1 == null) {
                                                                     root_tFileInputJSON_1 =
document_tFileInputJSON_1
        .read(jsonPathCache_tFileInputJSON_1.getCompiledJsonPath("$"));
                                                              value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(root_tFileInputJSON_1);
                                                      } else {
                                                             value_tFileInputJSON_1 =
compiledJsonPath_tFileInputJSON_1.read(row_tFileInputJSON_1);
                                                      }
                                                      if (value_tFileInputJSON_1 != null &&
!value_tFileInputJSON_1.toString().isEmpty()) {
                                                              row1.company_size =
ParserUtils.parseTo_Character(value_tFileInputJSON_1.toString());
                                                      } else {
                                                              row1.company_size =
                                                                             null;
                                                      }
```

```
} catch
(com.jayway.jsonpath.PathNotFoundException e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                                     row1.company_size =
                                                                    null;
                                             }
                                      } catch (java.lang.Exception e_tFileInputJSON_1) {
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                             whetherReject_tFileInputJSON_1 = true;
       System.err.println(e_tFileInputJSON_1.getMessage());
                                             row1 = null;
       globalMap.put("tFileInputJSON_1_ERROR_MESSAGE", e_tFileInputJSON_1.getMessage());
                                      }
//}
                                      * [tFileInputJSON_1 begin ] stop
                                      */
                                      /**
                                      * [tFileInputJSON_1 main] start
                                      */
                                      currentComponent = "tFileInputJSON_1";
                                      tos_count_tFileInputJSON_1++;
                                      /**
```

```
* [tFileInputJSON_1 main] stop
                                     */
                                     /**
                                     * [tFileInputJSON_1 process_data_begin ] start
                                     */
                                     currentComponent = "tFileInputJSON_1";
                                     /**
                                     * [tFileInputJSON_1 process_data_begin ] stop
                                     */
// Start of branch "row1"
                                     if (row1 != null) {
                                            /**
                                             * [tLogRow_1 main ] start
                                             */
                                            currentComponent = "tLogRow_1";
String[] row_tLogRow_1 = new String[11];
                                            if (row1.work_year != null) { //
                                                    row_tLogRow_1[0] =
String.valueOf(row1.work_year);
                                            }//
```

```
if (row1.experience_level != null) { //
                                                       row_tLogRow_1[1] =
String.valueOf(row1.experience_level);
                                               }//
                                                if (row1.employment_type != null) { //
                                                       row_tLogRow_1[2] =
String.valueOf(row1.employment_type);
                                               }//
                                               if (row1.job_title != null) { //
                                                       row_tLogRow_1[3] =
String.valueOf(row1.job_title);
                                               }//
                                               if (row1.salary != null) { //
                                                       row_tLogRow_1[4] =
String.valueOf(row1.salary);
                                               } //
                                               if (row1.salary_currency != null) { //
                                                       row_tLogRow_1[5] =
String.valueOf(row1.salary_currency);
                                               }//
                                               if (row1.salary_in_usd != null) { //
                                                       row_tLogRow_1[6] =
String.valueOf(row1.salary_in_usd);
```

```
}//
                                              if (row1.employee_residence != null) { //
                                                     row_tLogRow_1[7] =
String.valueOf(row1.employee_residence);
                                              }//
                                              if (row1.remote_ratio != null) { //
                                                     row_tLogRow_1[8] =
String.valueOf(row1.remote_ratio);
                                              } //
                                              if (row1.company_location != null) { //
                                                     row_tLogRow_1[9] =
String.valueOf(row1.company_location);
                                              }//
                                              if (row1.company_size != null) { //
                                                     row_tLogRow_1[10] =
String.valueOf(row1.company_size);
                                              }//
                                              util_tLogRow_1.addRow(row_tLogRow_1);
                                              nb_line_tLogRow_1++;
//////
//////
```

```
row2 = row1;
tos_count_tLogRow_1++;
/**
* [tLogRow_1 main] stop
*/
/**
* [tLogRow_1 process_data_begin ] start
*/
currentComponent = "tLogRow_1";
/**
* [tLogRow_1 process_data_begin ] stop
*/
/**
* [tFileOutputExcel_1 main ] start
*/
currentComponent = "tFileOutputExcel_1";
if (row2.work_year != null) {
```

```
jxl.write.WritableCell
cell_0_tFileOutputExcel_1 = new jxl.write.Number(
       columnIndex_tFileOutputExcel_1,
       startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                      row2.work_year);
//modif start
                                                      // If we keep the cell format from the
existing cell in sheet
//modif ends
       writableSheet_tFileOutputExcel_1.addCell(cell_0_tFileOutputExcel_1);
                                                      int currentWith_0_tFileOutputExcel_1 =
String
                                                                      .valueOf(((jxl.write.Number)
cell_0_tFileOutputExcel_1).getValue()).trim().length();
                                                      currentWith_0_tFileOutputExcel_1 =
currentWith_0_tFileOutputExcel_1 > 10 ? 10
                                                                      :
currentWith_0_tFileOutputExcel_1;
                                                      fitWidth_tFileOutputExcel_1[0] =
fitWidth_tFileOutputExcel_1[0] > currentWith_0_tFileOutputExcel_1
                                                                      ?
fitWidth_tFileOutputExcel_1[0]
currentWith_0_tFileOutputExcel_1 + 2;
                                              }
```

if (row2.experience_level != null) {

columnIndex_tFileOutputExcel_1 = 0;

```
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 1;
                                                       jxl.write.WritableCell
cell_1_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                       row2.experience_level);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_1_tFileOutputExcel_1);
                                                       int currentWith_1_tFileOutputExcel_1 =
cell_1_tFileOutputExcel_1.getContents().trim()
                                                                       .length();
                                                       fitWidth_tFileOutputExcel_1[1] =
fitWidth\_tFileOutputExcel\_1[1] > currentWith\_1\_tFileOutputExcel\_1
                                                                       ?
fitWidth_tFileOutputExcel_1[1]
currentWith_1_tFileOutputExcel_1 + 2;
                                               }
```

if (row2.employment_type != null) {

```
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 2;
                                                       jxl.write.WritableCell
cell_2_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                      row2.employment_type);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_2_tFileOutputExcel_1);
                                                       int currentWith_2_tFileOutputExcel_1 =
cell_2_tFileOutputExcel_1.getContents().trim()
                                                                      .length();
                                                       fitWidth_tFileOutputExcel_1[2] =
fitWidth_tFileOutputExcel_1[2] > currentWith_2_tFileOutputExcel_1
                                                                       ?
fitWidth_tFileOutputExcel_1[2]
currentWith_2_tFileOutputExcel_1 + 2;
                                               }
                                               if (row2.job_title != null) {
```

//modif start

```
jxl.write.WritableCell
cell_3_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                       row2.job_title);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_3_tFileOutputExcel_1);
                                                       int currentWith_3_tFileOutputExcel_1 =
cell_3_tFileOutputExcel_1.getContents().trim()
                                                                        .length();
                                                       fitWidth_tFileOutputExcel_1[3] =
fitWidth\_tFileOutputExcel\_1[3] > currentWith\_3\_tFileOutputExcel\_1
                                                                        ?
fitWidth_tFileOutputExcel_1[3]
currentWith_3_tFileOutputExcel_1 + 2;
                                               }
                                                if (row2.salary != null) {
```

//modif start

columnIndex_tFileOutputExcel_1 = 3;

```
jxl.write.WritableCell
cell_4_tFileOutputExcel_1 = new jxl.write.Number(
       columnIndex_tFileOutputExcel_1,
       startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                      row2.salary);
//modif start
                                                      // If we keep the cell format from the
existing cell in sheet
//modif ends
       writableSheet_tFileOutputExcel_1.addCell(cell_4_tFileOutputExcel_1);
                                                      int currentWith_4_tFileOutputExcel_1 =
String
                                                                      .valueOf(((jxl.write.Number)
cell_4_tFileOutputExcel_1).getValue()).trim().length();
                                                      currentWith_4_tFileOutputExcel_1 =
currentWith_4_tFileOutputExcel_1 > 10 ? 10
                                                                      :
currentWith_4_tFileOutputExcel_1;
                                                      fitWidth_tFileOutputExcel_1[4] =
fitWidth_tFileOutputExcel_1[4] > currentWith_4_tFileOutputExcel_1
                                                                      ?
fitWidth_tFileOutputExcel_1[4]
currentWith_4_tFileOutputExcel_1 + 2;
                                              }
```

if (row2.salary_currency != null) {

columnIndex_tFileOutputExcel_1 = 4;

```
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 5;
                                                       jxl.write.WritableCell
cell_5_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                       row2.salary_currency);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_5_tFileOutputExcel_1);
                                                       int currentWith_5_tFileOutputExcel_1 =
cell_5_tFileOutputExcel_1.getContents().trim()
                                                                       .length();
                                                       fitWidth_tFileOutputExcel_1[5] =
fitWidth\_tFileOutputExcel\_1[5] > currentWith\_5\_tFileOutputExcel\_1
                                                                       ?
fitWidth_tFileOutputExcel_1[5]
currentWith_5_tFileOutputExcel_1 + 2;
                                               }
```

if (row2.salary_in_usd != null) {

```
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 6;
                                                       jxl.write.WritableCell
cell_6_tFileOutputExcel_1 = new jxl.write.Number(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                      row2.salary_in_usd);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_6_tFileOutputExcel_1);
                                                       int currentWith_6_tFileOutputExcel_1 =
String
                                                                      .valueOf(((jxl.write.Number)
cell_6_tFileOutputExcel_1).getValue()).trim().length();
                                                       currentWith_6_tFileOutputExcel_1 =
currentWith_6_tFileOutputExcel_1 > 10 ? 10
                                                                      :
currentWith_6_tFileOutputExcel_1;
                                                       fitWidth_tFileOutputExcel_1[6] =
fitWidth\_tFileOutputExcel\_1[6] > currentWith\_6\_tFileOutputExcel\_1
                                                                      ?
fitWidth_tFileOutputExcel_1[6]
currentWith_6_tFileOutputExcel_1 + 2;
```

}

```
if (row2.employee_residence != null) {
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 7;
                                                       jxl.write.WritableCell
cell_7_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                       row2.employee_residence);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_7_tFileOutputExcel_1);
                                                       int currentWith_7_tFileOutputExcel_1 =
cell_7_tFileOutputExcel_1.getContents().trim()
                                                                       .length();
                                                       fitWidth_tFileOutputExcel_1[7] =
fitWidth\_tFileOutputExcel\_1[7] > currentWith\_7\_tFileOutputExcel\_1
                                                                       ?
fitWidth_tFileOutputExcel_1[7]
currentWith_7_tFileOutputExcel_1 + 2;
                                               }
```

```
if (row2.remote_ratio != null) {
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 8;
                                                       jxl.write.WritableCell
cell_8_tFileOutputExcel_1 = new jxl.write.Number(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                      row2.remote_ratio);
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_8_tFileOutputExcel_1);
                                                       int currentWith_8_tFileOutputExcel_1 =
String
                                                                      .valueOf(((jxl.write.Number)
cell_8_tFileOutputExcel_1).getValue()).trim().length();
                                                       currentWith_8_tFileOutputExcel_1 =
currentWith_8_tFileOutputExcel_1 > 10 ? 10
                                                                      :
currentWith_8_tFileOutputExcel_1;
                                                       fitWidth_tFileOutputExcel_1[8] =
fitWidth_tFileOutputExcel_1[8] > currentWith_8_tFileOutputExcel_1
                                                                      ?
fitWidth_tFileOutputExcel_1[8]
```

```
currentWith_8_tFileOutputExcel_1 + 2;
                                                }
                                                if (row2.company location != null) {
//modif start
                                                        columnIndex_tFileOutputExcel_1 = 9;
                                                        jxl.write.WritableCell
cell_9_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
                                                                        row2.company_location);
//modif start
                                                        // If we keep the cell format from the
existing cell in sheet
//modif ends
        writable Sheet\_tFile Output Excel\_1. add Cell (cell\_9\_tFile Output Excel\_1);
                                                        int currentWith_9_tFileOutputExcel_1 =
cell_9_tFileOutputExcel_1.getContents().trim()
                                                                        .length();
                                                        fitWidth_tFileOutputExcel_1[9] =
fitWidth\_tFileOutputExcel\_1[9] > currentWith\_9\_tFileOutputExcel\_1
                                                                        ?
fitWidth_tFileOutputExcel_1[9]
currentWith_9_tFileOutputExcel_1 + 2;
```

```
}
                                               if (row2.company_size != null) {
//modif start
                                                       columnIndex_tFileOutputExcel_1 = 10;
                                                       jxl.write.WritableCell
cell_10_tFileOutputExcel_1 = new jxl.write.Label(
        columnIndex_tFileOutputExcel_1,
        startRowNum_tFileOutputExcel_1 + nb_line_tFileOutputExcel_1,
//modif end
        String.valueOf(row2.company_size));
//modif start
                                                       // If we keep the cell format from the
existing cell in sheet
//modif ends
        writableSheet_tFileOutputExcel_1.addCell(cell_10_tFileOutputExcel_1);
                                                       int currentWith_10_tFileOutputExcel_1 =
cell_10_tFileOutputExcel_1.getContents().trim()
                                                                       .length();
                                                       fitWidth_tFileOutputExcel_1[10] =
fitWidth\_tFileOutputExcel\_1[10] > currentWith\_10\_tFileOutputExcel\_1
                                                                       ?
fitWidth\_tFileOutputExcel\_1[10]
currentWith_10_tFileOutputExcel_1 + 2;
                                               }
```

```
nb_line_tFileOutputExcel_1++;
row4 = row2;
tos_count_tFileOutputExcel_1++;
/**
* [tFileOutputExcel_1 main ] stop
*/
/**
* [tFileOutputExcel_1 process_data_begin ] start
*/
currentComponent = "tFileOutputExcel_1";
/**
* [tFileOutputExcel_1 process_data_begin ] stop
*/
/**
* [tAdvancedHash_row4 main ] start
*/
currentComponent = "tAdvancedHash_row4";
row4Struct row4_HashRow = new row4Struct();
row4_HashRow.work_year = row4.work_year;
```

```
row4_HashRow.experience_level =
row4.experience_level;
                                           row4_HashRow.employment_type =
row4.employment_type;
                                           row4_HashRow.job_title = row4.job_title;
                                           row4_HashRow.salary = row4.salary;
                                           row4_HashRow.salary_currency =
row4.salary_currency;
                                           row4_HashRow.salary_in_usd = row4.salary_in_usd;
                                           row4_HashRow.employee_residence =
row4.employee_residence;
                                           row4_HashRow.remote_ratio = row4.remote_ratio;
                                           row4_HashRow.company_location =
row4.company_location;
                                           row4_HashRow.company_size = row4.company_size;
                                           tHash_Lookup_row4.put(row4_HashRow);
                                           tos_count_tAdvancedHash_row4++;
                                           /**
                                            * [tAdvancedHash_row4 main] stop
                                            */
```

```
/**
* [tAdvancedHash_row4 process_data_begin ] start
*/
currentComponent = "tAdvancedHash_row4";
/**
* [tAdvancedHash_row4 process_data_begin] stop
*/
/**
* [tAdvancedHash_row4 process_data_end ] start
*/
currentComponent = "tAdvancedHash_row4";
/**
* [tAdvancedHash_row4 process_data_end] stop
*/
/**
* [tFileOutputExcel_1 process_data_end ] start
*/
currentComponent = "tFileOutputExcel_1";
/**
* [tFileOutputExcel_1 process_data_end ] stop
*/
/**
```

```
*/
                                             currentComponent = "tLogRow_1";
                                              /**
                                              * [tLogRow_1 process_data_end] stop
                                              */
                                      } // End of branch "row1"
                                      /**
                                      * [tFileInputJSON_1 process_data_end ] start
                                       */
                                      currentComponent = "tFileInputJSON_1";
                                      /**
                                      * [tFileInputJSON_1 process_data_end ] stop
                                      */
                                      /**
                                      * [tFileInputJSON_1 end ] start
                                       */
                                      currentComponent = "tFileInputJSON_1";
                              }
                              globalMap.put("tFileInputJSON_1_NB_LINE",
nb_line_tFileInputJSON_1);
```

* [tLogRow_1 process_data_end] start

```
ok_Hash.put("tFileInputJSON_1", true);
                             end_Hash.put("tFileInputJSON_1", System.currentTimeMillis());
                             /**
                              * [tFileInputJSON_1 end ] stop
                              */
                              * [tLogRow_1 end] start
                              */
                             currentComponent = "tLogRow_1";
//////
                             java.io.PrintStream consoleOut_tLogRow_1 = null;
                             if (globalMap.get("tLogRow_CONSOLE") != null) {
                                    consoleOut_tLogRow_1 = (java.io.PrintStream)
globalMap.get("tLogRow_CONSOLE");
                             } else {
                                    consoleOut_tLogRow_1 = new java.io.PrintStream(new
java.io.BufferedOutputStream(System.out));
                                    globalMap.put("tLogRow_CONSOLE",
consoleOut_tLogRow_1);
                             }
                             consoleOut_tLogRow_1.println(util_tLogRow_1.format().toString());
                             consoleOut_tLogRow_1.flush();
//////
                             globalMap.put("tLogRow_1_NB_LINE", nb_line_tLogRow_1);
```

```
ok_Hash.put("tLogRow_1", true);
                               end_Hash.put("tLogRow_1", System.currentTimeMillis());
                               /**
                               * [tLogRow_1 end ] stop
                               */
                               /**
                               * [tFileOutputExcel 1 end ] start
                               */
                               currentComponent = "tFileOutputExcel_1";
                               writeableWorkbook_tFileOutputExcel_1.write();
                               writeableWorkbook_tFileOutputExcel_1.close();
                               if (headerIsInserted_tFileOutputExcel_1 &&
nb_line_tFileOutputExcel_1 > 0) {
                                       nb_line_tFileOutputExcel_1 = nb_line_tFileOutputExcel_1 -
1;
                               }
                               globalMap.put("tFileOutputExcel_1_NB_LINE",
nb_line_tFileOutputExcel_1);
                               ok_Hash.put("tFileOutputExcel_1", true);
                               end_Hash.put("tFileOutputExcel_1", System.currentTimeMillis());
                               /**
                               * [tFileOutputExcel 1 end ] stop
                               */
```

```
* [tAdvancedHash_row4 end ] start
                               */
                               currentComponent = "tAdvancedHash_row4";
                               tHash_Lookup_row4.endPut();
                               ok_Hash.put("tAdvancedHash_row4", true);
                               end_Hash.put("tAdvancedHash_row4", System.currentTimeMillis());
                               /**
                               * [tAdvancedHash_row4 end ] stop
                               */
                       } // end the resume
               } catch (java.lang.Exception e) {
                       TalendException te = new TalendException(e, currentComponent,
globalMap);
                       throw te;
               } catch (java.lang.Error error) {
                       throw error;
               } finally {
                       try {
                               /**
                               * [tFileInputJSON_1 finally ] start
```

```
*/
currentComponent = "tFileInputJSON_1";
/**
* [tFileInputJSON_1 finally ] stop
*/
/**
* [tLogRow_1 finally ] start
*/
currentComponent = "tLogRow_1";
/**
* [tLogRow_1 finally ] stop
*/
/**
* [tFileOutputExcel_1 finally ] start
*/
currentComponent = "tFileOutputExcel_1";
/**
* [tFileOutputExcel_1 finally ] stop
*/
/**
* [tAdvancedHash_row4 finally ] start
*/
```

```
currentComponent = "tAdvancedHash_row4";
                        /**
                         * [tAdvancedHash_row4 finally ] stop
                         */
                } catch (java.lang.Exception e) {
                        // ignore
                } catch (java.lang.Error error) {
                        // ignore
                }
                resourceMap = null;
        }
        globalMap.put("tFileInputJSON_1_SUBPROCESS_STATE", 1);
}
public String resuming_logs_dir_path = null;
public String resuming_checkpoint_path = null;
public String parent_part_launcher = null;
private String resumeEntryMethodName = null;
private boolean globalResumeTicket = false;
public boolean watch = false;
// portStats is null, it means don't execute the statistics
public Integer portStats = null;
public int portTraces = 4334;
public String clientHost;
public String defaultClientHost = "localhost";
public String contextStr = "Default";
```

```
public String pid = "0";
        public String rootPid = null;
        public String fatherPid = null;
        public String fatherNode = null;
        public long startTime = 0;
        public boolean isChildJob = false;
        public String log4jLevel = "";
        private boolean enableLogStash;
        private boolean execStat = true;
        private ThreadLocal<java.util.Map<String, String>> threadLocal = new
ThreadLocal<java.util.Map<String, String>>() {
                protected java.util.Map<String, String> initialValue() {
                        java.util.Map<String, String> threadRunResultMap = new
java.util.HashMap<String, String>();
                        threadRunResultMap.put("errorCode", null);
                        threadRunResultMap.put("status", "");
                        return threadRunResultMap;
                };
        };
        protected PropertiesWithType context_param = new PropertiesWithType();
        public java.util.Map<String, Object> parentContextMap = new java.util.HashMap<String,</pre>
Object>();
        public String status = "";
        public static void main(String[] args) {
                final etl_project_process etl_project_processClass = new etl_project_process();
```

public boolean isDefaultContext = true;

```
int exitCode = etl_project_processClass.runJobInTOS(args);
        System.exit(exitCode);
}
public String[][] runJob(String[] args) {
        int exitCode = runJobInTOS(args);
        String[][] bufferValue = new String[][] { { Integer.toString(exitCode) } };
        return bufferValue;
}
public boolean hastBufferOutputComponent() {
        boolean hastBufferOutput = false;
        return hastBufferOutput;
}
public int runJobInTOS(String[] args) {
        // reset status
        status = "";
        String lastStr = "";
        for (String arg : args) {
                 if (arg.equalsIgnoreCase("--context_param")) {
                         lastStr = arg;
                 } else if (lastStr.equals("")) {
                         evalParam(arg);
                 } else {
```

```
lastStr = "";
                         }
                }
                enableLogStash = "true".equalsIgnoreCase(System.getProperty("audit.enabled"));
                if (clientHost == null) {
                         clientHost = defaultClientHost;
                }
                if (pid == null | | "0".equals(pid)) {
                         pid = TalendString.getAsciiRandomString(6);
                }
                if (rootPid == null) {
                         rootPid = pid;
                }
                if (fatherPid == null) {
                        fatherPid = pid;
                } else {
                         isChildJob = true;
                }
                boolean inOSGi = routines.system.BundleUtils.inOSGi();
                if (inOSGi) {
                        java.util.Dictionary<String, Object> jobProperties =
routines.system.BundleUtils.getJobProperties(jobName);
                         if (jobProperties != null && jobProperties.get("context") != null) {
                                 contextStr = (String) jobProperties.get("context");
```

evalParam(lastStr + " " + arg);

```
}
                }
                try {
                        // call job/subjob with an existing context, like: --context=production. if
                        // without this parameter, there will use the default context instead.
                        java.io.InputStream inContext =
etl_project_process.class.getClassLoader().getResourceAsStream(
                                         "local_project/etl_project_process_0_1/contexts/" +
contextStr + ".properties");
                        if (inContext == null) {
                                 inContext = etl_project_process.class.getClassLoader()
                                                 .getResourceAsStream("config/contexts/" +
contextStr + ".properties");
                        }
                        if (inContext != null) {
                                 try {
                                         // defaultProps is in order to keep the original context value
                                         if (context != null && context.isEmpty()) {
                                                 defaultProps.load(inContext);
                                                 context = new ContextProperties(defaultProps);
                                         }
                                 } finally {
                                         inContext.close();
                                 }
                        } else if (!isDefaultContext) {
                                 // print info and job continue to run, for case: context_param is not
empty.
                                 System.err.println("Could not find the context " + contextStr);
                        }
                        if (!context_param.isEmpty()) {
```

```
context.putAll(context_param);
                               // set types for params from parentJobs
                               for (Object key : context_param.keySet()) {
                                       String context_key = key.toString();
                                       String context_type =
context_param.getContextType(context_key);
                                       context.setContextType(context_key, context_type);
                               }
                       }
                       class ContextProcessing {
                               private void processContext_0() {
                               }
                               public void processAllContext() {
                                       processContext_0();
                               }
                       }
                       new ContextProcessing().processAllContext();
               } catch (java.io.IOException ie) {
                       System.err.println("Could not load context " + contextStr);
                       ie.printStackTrace();
               }
               // get context value from parent directly
               if (parentContextMap != null && !parentContextMap.isEmpty()) {
               }
               // Resume: init the resumeUtil
               resumeEntryMethodName =
ResumeUtil.getResumeEntryMethodName(resuming_checkpoint_path);
```

```
resumeUtil = new ResumeUtil(resuming_logs_dir_path, isChildJob, rootPid);
               resumeUtil.initCommonInfo(pid, rootPid, fatherPid, projectName, jobName,
contextStr, jobVersion);
               List<String> parametersToEncrypt = new java.util.ArrayList<String>();
               // Resume: jobStart
               resumeUtil.addLog("JOB STARTED", "JOB:" + jobName, parent part launcher,
Thread.currentThread().getId() + "",
                               "", "", "", resumeUtil.convertToJsonText(context,
parametersToEncrypt));
               java.util.concurrent.ConcurrentHashMap<Object, Object> concurrentHashMap = new
java.util.concurrent.ConcurrentHashMap<Object, Object>();
               globalMap.put("concurrentHashMap", concurrentHashMap);
               long startUsedMemory = Runtime.getRuntime().totalMemory() -
Runtime.getRuntime().freeMemory();
               long endUsedMemory = 0;
               long end = 0;
               startTime = System.currentTimeMillis();
               this.globalResumeTicket = true;// to run tPreJob
               this.globalResumeTicket = false;// to run others jobs
               try {
                       errorCode = null;
                       tFileInputDelimited_1Process(globalMap);
                       if (!"failure".equals(status)) {
                               status = "end";
                       }
               } catch (TalendException e_tFileInputDelimited_1) {
```

```
globalMap.put("tFileInputDelimited_1_SUBPROCESS_STATE", -1);
                       e_tFileInputDelimited_1.printStackTrace();
               }
               this.globalResumeTicket = true;// to run tPostJob
                end = System.currentTimeMillis();
               if (watch) {
                       System.out.println((end - startTime) + " milliseconds");
                }
                endUsedMemory = Runtime.getRuntime().totalMemory() -
Runtime.getRuntime().freeMemory();
               if (false) {
                       System.out.println(
                                       (endUsedMemory - startUsedMemory) + " bytes memory
increase when running : etl_project_process");
                }
               int returnCode = 0;
               if (errorCode == null) {
                       returnCode = status != null && status.equals("failure") ? 1 : 0;
               } else {
                       returnCode = errorCode.intValue();
                }
                resumeUtil.addLog("JOB_ENDED", "JOB:" + jobName, parent_part_launcher,
Thread.currentThread().getId() + "", "",
                               "" + returnCode, "", "", "");
```

```
return returnCode;
}
// only for OSGi env
public void destroy() {
}
private java.util.Map<String, Object> getSharedConnections4REST() {
        java.util.Map<String, Object> connections = new java.util.HashMap<String, Object>();
        return connections;
}
private void evalParam(String arg) {
        if (arg.startsWith("--resuming_logs_dir_path")) {
                resuming_logs_dir_path = arg.substring(25);
        } else if (arg.startsWith("--resuming_checkpoint_path")) {
                resuming_checkpoint_path = arg.substring(27);
        } else if (arg.startsWith("--parent_part_launcher")) {
                parent_part_launcher = arg.substring(23);
        } else if (arg.startsWith("--watch")) {
                watch = true;
        } else if (arg.startsWith("--stat_port=")) {
                String portStatsStr = arg.substring(12);
                if (portStatsStr != null && !portStatsStr.equals("null")) {
                         portStats = Integer.parseInt(portStatsStr);
                }
```

} else if (arg.startsWith("--trace_port=")) {

```
} else if (arg.startsWith("--client_host=")) {
                         clientHost = arg.substring(14);
                } else if (arg.startsWith("--context=")) {
                         contextStr = arg.substring(10);
                         isDefaultContext = false;
                } else if (arg.startsWith("--father_pid=")) {
                         fatherPid = arg.substring(13);
                } else if (arg.startsWith("--root pid=")) {
                         rootPid = arg.substring(11);
                } else if (arg.startsWith("--father_node=")) {
                         fatherNode = arg.substring(14);
                } else if (arg.startsWith("--pid=")) {
                         pid = arg.substring(6);
                } else if (arg.startsWith("--context_type")) {
                         String keyValue = arg.substring(15);
                         int index = -1;
                         if (keyValue != null && (index = keyValue.indexOf('=')) > -1) {
                                 if (fatherPid == null) {
                                          context_param.setContextType(keyValue.substring(0, index),
        replaceEscapeChars(keyValue.substring(index + 1)));
                                 } else { // the subjob won't escape the especial chars
                                          context_param.setContextType(keyValue.substring(0, index),
keyValue.substring(index + 1));
                                 }
                         }
                } else if (arg.startsWith("--context_param")) {
                         String keyValue = arg.substring(16);
                         int index = -1;
```

portTraces = Integer.parseInt(arg.substring(13));

```
if (keyValue != null && (index = keyValue.indexOf('=')) > -1) {
                                 if (fatherPid == null) {
                                         context_param.put(keyValue.substring(0, index),
replaceEscapeChars(keyValue.substring(index + 1)));
                                 } else { // the subjob won't escape the especial chars
                                         context_param.put(keyValue.substring(0, index),
keyValue.substring(index + 1));
                                 }
                         }
                } else if (arg.startsWith("--log4jLevel=")) {
                         log4jLevel = arg.substring(13);
                } else if (arg.startsWith("--audit.enabled") && arg.contains("=")) {// for trunjob call
                         final int equal = arg.indexOf('=');
                         final String key = arg.substring("--".length(), equal);
                         System.setProperty(key, arg.substring(equal + 1));
                }
        }
        private static final String
NULL_VALUE_EXPRESSION_IN_COMMAND_STRING_FOR_CHILD_JOB_ONLY = "<TALEND_NULL>";
        private final String[][] escapeChars = { { "\\\", "\\" }, { "\\", "\\" }, { "\\", "\\" }, { "\\r", "\r" },
                         { "\\f", "\f" }, { "\\b", "\b" }, { "\\t", "\t" } };
        private String replaceEscapeChars(String keyValue) {
                if (keyValue == null | | ("").equals(keyValue.trim())) {
                         return keyValue;
                }
                 StringBuilder result = new StringBuilder();
                int currIndex = 0;
```

```
while (currIndex < keyValue.length()) {
                         int index = -1;
                         // judege if the left string includes escape chars
                         for (String[] strArray : escapeChars) {
                                 index = keyValue.indexOf(strArray[0], currIndex);
                                 if (index >= 0) {
                                          result.append(keyValue.substring(currIndex, index +
strArray[0].length()).replace(strArray[0],
                                                           strArray[1]));
                                          currIndex = index + strArray[0].length();
                                          break;
                                 }
                         }
                         // if the left string doesn't include escape chars, append the left into the
                         // result
                         if (index < 0) {
                                 result.append(keyValue.substring(currIndex));
                                 currIndex = currIndex + keyValue.length();
                         }
                }
                return result.toString();
        }
        public Integer getErrorCode() {
                return errorCode;
        }
        public String getStatus() {
                return status;
```

}
ResumeUtil resumeUtil = null;
}
/*************************************
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