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| **Non-Inheritance Extract Class Refactoring Suggestions** | | |
| Original Class  [*N*split] | Extract Class | |
| New Class  [Superclass]  [Subclass] | Methods/Fields |
| jdbcDatabaseMetaData  [3] | jdbcDatabaseMetaData\_new\_1  [-]  [-] | getDatabaseProductName()  getDatabaseProductVersion()  isReadOnly()  getDatabaseMajorVersion()  getUserName()  getDatabaseMinorVersion()  jdbcDatabaseMetaData(jdbcConnection)  execute(String)  getConnection()  connection  getURL() |
| jdbcDatabaseMetaData\_new\_2  [-]  [-] | translateSchema(String)  supportsSchemasInIndexDefinitions()  supportsSchemasInPrivilegeDefinitions()  useSchemaDefault  supportsSchemasInTableDefinitions() |
| jdbcDatabaseMetaData\_new\_3  [-]  [-] | supportsDataManipulationTransactionsOnly()  getMaxStatements()  supportsGroupBy()  supportsSavepoints()  supportsOpenCursorsAcrossRollback()  supportsSubqueriesInIns()  supportsSchemasInDataManipulation()  doesMaxRowSizeIncludeBlobs()  getCatalogSeparator()  storesMixedCaseQuotedIdentifiers()  getMaxConnections()  getMaxTableNameLength()  getSearchStringEscape()  supportsMultipleResultSets()  getIdentifierQuoteString()  supportsCatalogsInProcedureCalls()  othersInsertsAreVisible(int)  supportsGroupByBeyondSelect()  supportsSelectForUpdate()  locatorsUpdateCopy()  nullsAreSortedAtEnd()  supportsCatalogsInIndexDefinitions()  getMaxSchemaNameLength()  storesMixedCaseIdentifiers()  othersDeletesAreVisible(int)  supportsOrderByUnrelated()  storesUpperCaseQuotedIdentifiers()  storesLowerCaseQuotedIdentifiers()  dataDefinitionCausesTransactionCommit()  supportsPositionedDelete()  getTimeDateFunctions()  supportsUnion()  supportsTransactions()  getDriverName()  ownInsertsAreVisible(int)  supportsFullOuterJoins()  supportsOpenStatementsAcrossRollback()  supportsResultSetConcurrency(int, int)  supportsResultSetType(int)  getMaxColumnsInIndex()  supportsCatalogsInPrivilegeDefinitions()  supportsExtendedSQLGrammar()  supportsLimitedOuterJoins()  supportsAlterTableWithDropColumn()  supportsMinimumSQLGrammar()  getDefaultTransactionIsolation()  getSchemaTerm()  supportsDifferentTableCorrelationNames()  getSystemFunctions()  getMaxColumnsInSelect()  nullsAreSortedHigh()  supportsConvert(int, int)  supportsMultipleTransactions()  getMaxBinaryLiteralLength()  supportsCorrelatedSubqueries()  supportsStatementPooling()  supportsOpenStatementsAcrossCommit()  supportsBatchUpdates()  othersUpdatesAreVisible(int)  supportsANSI92FullSQL()  getJDBCMajorVersion()  BRI\_SESSION\_SCOPE\_IN\_LIST  getMaxColumnsInOrderBy()  getMaxStatementLength()  getNumericFunctions()  supportsExpressionsInOrderBy()  getProcedureTerm()  supportsResultSetHoldability(int)  supportsDataDefinitionAndDataManipulationTran  sactions()  ownUpdatesAreVisible(int)  supportsUnionAll()  whereTrue  supportsGroupByUnrelated()  allTablesAreSelectable()  supportsSubqueriesInExists()  getMaxColumnsInTable()  allProceduresAreCallable()  supportsIntegrityEnhancementFacility()  getMaxCursorNameLength()  getDriverMinorVersion()  dataDefinitionIgnoredInTransactions()  usesLocalFiles()  getMaxTablesInSelect()  supportsCatalogsInTableDefinitions()  selstar  getExtraNameCharacters()  supportsAlterTableWithAddColumn()  ownDeletesAreVisible(int)  supportsLikeEscapeClause()  getMaxCharLiteralLength()  storesUpperCaseIdentifiers()  supportsStoredProcedures()  supportsSubqueriesInComparisons()  supportsCatalogsInDataManipulation()  supportsNamedParameters()  supportsMixedCaseIdentifiers()  getMaxColumnNameLength()  supportsConvert()  BRI\_TRANSACTION\_SCOPE\_IN\_LIST  usesLocalFilePerTable()  getMaxColumnsInGroupBy()  getMaxUserNameLength()  getJDBCMinorVersion()  supportsTableCorrelationNames()  supportsOuterJoins()  insertsAreDetected(int)  deletesAreDetected(int)  supportsNonNullableColumns()  supportsMultipleOpenResults()  nullsAreSortedAtStart()  getMaxRowSize()  supportsPositionedUpdate()  supportsMixedCaseQuotedIdentifiers()  nullsAreSortedLow()  getSQLStateType()  supportsANSI92IntermediateSQL()  nullPlusNonNullIsNull()  supportsSubqueriesInQuantifieds()  getCatalogTerm()  supportsOpenCursorsAcrossCommit()  getMaxCatalogNameLength()  getDriverVersion()  getResultSetHoldability()  storesLowerCaseIdentifiers()  supportsANSI92EntryLevelSQL()  getMaxIndexLength()  INT\_COLUMNS\_NO\_NULLS  static {}  getBestRowIdentifier(String,String,String, int,  boolean)  supportsTransactionIsolationLevel(int)  getSQLKeywords()  updatesAreDetected(int)  BRI\_TEMPORARY\_SCOPE\_IN\_LIST  supportsGetGeneratedKeys()  supportsCoreSQLGrammar()  isCatalogAtStart()  getStringFunctions()  getDriverMajorVersion()  supportsSchemasInProcedureCalls()  supportsColumnAliasing()  getMaxProcedureNameLength()  getTableTypes()  getTypeInfo()  getSchemas()  getCatalogs()  getCrossReference(String,String,String,String,Strin  g,String)  getPrimaryKeys(String,String,String)  getExportedKeys(String,String,String)  getImportedKeys(String,String,String)  getIndexInfo(String,String,String, boolean,  boolean)  getVersionColumns(String,String,String)  getColumns(String,String,String,String)  getTables(String,String,String,String[])  getProcedures(String,String,String)  getUDTs(String,String,String, int[])  getSuperTypes(String,String,String)  getColumnPrivileges(String,String,String,String)  getTablePrivileges(String,String,String)  getAttributes(String,String,String,String)  executeSelect(String,String)  wantsIsNull(String)  toQueryPrefix(String)  and(String,String,Object)  getProcedureColumns(String,String,String,String)  getSuperTables(String,String,String) |
| Parser  [2] | Parser\_new\_1  [-]  [-] | processColumnList(Tokenizer, boolean)  addFilterColumns(TableFilter,HsqlArrayList, int)  subQueryLevel  getColumnNames(Database,Table,Tokenizer,  boolean)  addCondition(Expression,Expression)  addJoinCondition(Expression,Expression,TableFilt  er, boolean)  reset(String)  parseSubquery(int,HsqlNameManager$HsqlNam  e[], boolean, int)  parseLikePredicate(Expression)  resolveSelectTableFilter(Select,HsqlArrayList,Hsql  ArrayList)  parseSelect(int, boolean, boolean, boolean,  boolean)  compileSelectStatement(int)  compileCallStatement()  parseTableFilter(boolean)  Parser(Session,Database,Tokenizer)  compileInsertStatement()  compileUpdateStatement()  compileDeleteStatement()  readSequenceExpression()  parseLimit(String,Select, boolean)  getInsertColumnValueExpressions(Table,Expressio  n[], int)  session  checkTableWriteAccess(Table, int)  parseOrderBy(Select,HsqlArrayList)  parseColumnList()  parseExpression()  tokenizer  parseCloseBrackets(int)  parseUnion(String)  parseOpenBrackets()  parseOpenBracketsSelect()  parseSimpleTableFilter(int)  database  tokenSet  simpleFunctions  getViewSubquery(View)  setAsView(View)  subQueryList  noSubqueries  getSortedSubqueries()  getParameters()  parameters  clearParameters()  noParameters  static {} |
|  |  |
| Parser\_new\_2  [-]  [-] | setCompilingView()  compilingView  isCompilingView()  resolveOrderByExpression(Expression,Select,Hsql  ArrayList)  resolveOrderByColumnIndex(Expression,HsqlArra  yList, int)  parseCaseWhen(Expression)  parseBetweenPredicate(Expression)  wasQuoted  sTable  iType  readNullIfExpression()  readPositionExpression()  oData  readExtractExpression()  sToken  readTrimExpression()  parseInPredicate(Expression)  readColumnExpression()  read()  readTerm()  readToken()  readDefaultClause(int)  readCastExpression()  parseAllAnyPredicate()  readAggregate()  readCondition()  readCaseExpression()  readSubstringExpression()  readCaseWhenExpression()  readCoalesceExpression()  readAnd()  readOr()  readThis(int)  iToken  readConcat()  readFactor()  readSum()  readConcatExpression()  sSchema |
| DatabaseManagerSwing  [2] | DatabaseManagerSwing\_new\_1  [-]  [-] | NULL\_STR  GRID\_BOX\_TEXT  BUTTON\_CHECK\_PERIOD  keyPressed(KeyEvent)  ROWCOUNTS\_BOX\_TEXT  windowDeactivated(WindowEvent)  SHOWSCHEMAS\_BOX\_TEXT  windowActivated(WindowEvent)  quoteTableName(String)  quoteObjectName(String)  handlePopup(MouseEvent)  mouseReleased(MouseEvent)  alreadyHandled  mousePressed(MouseEvent)  windowClosed(WindowEvent)  windowOpened(WindowEvent)  mouseExited(MouseEvent)  AUTOCOMMIT\_BOX\_TEXT  keyReleased(KeyEvent)  butExecute  mouseEntered(MouseEvent)  mouseClicked(MouseEvent)  SHOWTIPS\_BOX\_TEXT  windowDeiconified(WindowEvent)  AUTOREFRESH\_BOX\_TEXT  jtoolbar  LOGGING\_BOX\_TEXT  windowIconified(WindowEvent)  SHOWSYS\_BOX\_TEXT  addMenuItems(JMenu,Object[])  TT\_AVAILABLE  defScript  addMenu(JMenuBar,String,Object[])  busyText  backgroundIt(Runnable,String)  refreshTree()  treeRefreshRunnable  jframe  buttonUpdaterThread  stop()  start()  buttonUpdater  currentLAF  waitCursor  disableButtonRunnable  dummyThread  enableButtonRunnable  boxAutoRefresh  boxLogging  boxRowCounts  boxShowSchemas  boxShowGrid  boxShowSys  schemaListListener  showSchemas  showSys  isOracle  showIndexDetails  schemaFilter  nonSystables  usertables  dMeta  updateSchemaList()  directRefreshTree()  treeModel  makeNode(Object,MutableTreeNode)  rowConn  getRowCounts(Vector,Vector)  displayRowCounts  rootNode  tScrollPane  oracleSysUsers  mitemUpdateSchemas  mnuSchemas  rbAllSchemas  rbNativeLF  prefs  localActionList  mitemAbout  mitemHelp  jbuttonExecute  main()  DatabaseManagerSwing(JFrame)  DatabaseManagerSwing()  createToolBar()  tipMap  showTooltips  resetTooltips()  jbuttonClear  boxTooltips  rbJavaLF  rbMotifLF  setStatusLine(String, int)  jStatusLine  iReadyStatus  bMustExit  setMustExit(boolean)  iMaxRecent  iRecent  addToRecent(String)  mRecent  getParameter(String)  showUsage()  NL  ABOUT\_TEXT  HELP\_TEXT  homedir  tString  fString  oracleSysSchemas  DEFAULT\_RCFILE  defUser  defPassword  defDriver  defURL  init()  main(String[])  static {}  READY\_STATUS |
| DatabaseManagerSwing\_new\_2  [-]  [-] | keyTyped(KeyEvent)  tTree  txtCommandScroll  doLayout()  gResultTable  ewSplitPane  pStatus  tableModel  nsSplitPane  fMainCursor  txtResultCursor  txtCommandCursor  getAppletContext()  sRecent  defDirectory  refForFontDialogSwing  boxAutoCommit  updateAutoCommitBox()  cConn  autoRefresh  fMain  bHelp  gScrollPane  lTime  sqlScriptBuffer  connect(Connection)  txtResult  txtResultScroll  windowClosing(WindowEvent)  setLF(String)  pResult  setResultsInText()  initGUI()  actionPerformed(ActionEvent)  sStatement  displayResults()  gridFormat  setWaiting(String)  showHelp(String[])  showResultInText()  setResultsInGrid()  updateResult()  gResult  formatResultSet(ResultSet)  clearResultPanel()  testPerformance()  executeSQL()  insertTestData()  clear()  txtCommand  executeCurrentSQL()  testStatement(Statement,String, int) |
| Tokenizer  [2] | Tokenizer\_new\_1  [-]  [-] | valueTokens  static {}  LONG\_MAX\_VALUE\_INCREMENT  lastTokenQuotedID  typeLongNameFirst  tokenIndex  nextTokenIndex  retainFirst  Tokenizer()  indexLongNameFirst  getLength()  iLength  back()  getToken()  reset(String)  Tokenizer(String)  sCommand  getPart(int, int)  getString(char)  iIndex  getPosition()  setPartMarker()  beginIndex  getPartMarker()  setPartMarker(int)  getLastPart() |
| Tokenizer\_new\_2  [-]  [-] | REMARK\_LINE  NO\_TYPE  TIME  BOOLEAN  LONG\_NAME  LONG  NAMED\_PARAM  NUMBER  REMARK  DECIMAL  FLOAT  QUOTED\_IDENTIFIER  SPECIAL  DATE  TIMESTAMP  NULL  getInType(int)  getInt()  getLongNamePre()  sLongNameFirst  wasFirstQuotedIdentifier()  wasQuotedIdentifier()  bWait  getLongNameFirst()  wasParameter()  wasValue()  wasLongName()  getType()  iType  wasSimpleToken()  matchThis(String)  wasSimpleName()  wasName()  throwUnexpected()  getSimpleName()  getAsValue()  isGetThis(String)  getString()  STRING  getName()  NAME  getThis(String)  sToken  getBigint()  wasThis(String)  getSimpleToken() |
| Session  [3] | Session\_new\_1  [SessionInterface]  [-] | actionTimestamp  getCurrentDate()  currentDate  getCurrentTime()  currentTime  getCurrentTimestamp()  currentTimestamp  currentDateTimeSCN  currentMillis  transactionTimestamp  getSession()  setScripting(boolean)  script  getScripting()  loggedSchema  isolationMode  sqlExecuteCompiledNoPreChecks(CompiledState  ment,Object[])  compiledStatementExecutor  sqlExecute(CompiledStatement,Object[])  isProcessingScript()  isProcessingScript  sessionId  compiledStatementManager  sqlExecute(Result)  parser  tokenizer  savepoints  releaseSavepoint(String)  nestedOldTransIndex  dbCommandInterpreter  sqlCompileStatement(String)  sqlExecuteBatchDirect(Result)  oldSchema  isSchemaDefintion()  startSchemaDefinition(String)  getTransactionSize()  rowActionList  isAutoCommit  getAutoCommitStatement()  isNestedTransaction()  isNestedTransaction  Session(Database,User, boolean, boolean, int)  sqlExecuteBatch(Result)  getAttributes()  addDeleteAction(Table,Row)  addInsertAction(Table,Row)  endNestedTransaction(boolean)  savepoint(String)  endSchemaDefinition()  getSchemaName(String)  setSchema(String)  getSchemaHsqlName(String)  getSchemaHsqlNameForWrite(String)  sqlExecuteDirectNoPreChecks(String)  getDatabase()  database  getInternalConnectionURL()  performPostExecute(Result)  beginNestedTransaction()  currentSchema  static {}  emptyUpdateCount  setAttributes(Result)  rollbackToSavepoint(String)  getIsolation()  isAutoCommit()  isReadOnly()  resetSession()  commit()  setAutoCommit(boolean)  prepareCommit()  isClosed()  setReadOnly(boolean)  rollback()  execute(Result)  startPhasedTransaction()  close()  getId()  setIsolation(int) |
| Session\_new\_2  [-]  [-] | getSchemaNameForWrite(String)  checkDDLWrite()  check(HsqlNameManager$HsqlName, int)  getUser()  setUser(User)  user  checkAdmin()  isAccessible(HsqlNameManager$HsqlName)  check(String)  isAccessible(String)  isAdmin()  getUsername()  resetSchema() |
| Session\_new\_3  [-]  [-] | getConnectTime()  connectTime  getLastIdentity()  setLastIdentity(Number)  lastIdentity  checkReadWrite()  isReadOnly  getInternalConnection()  intConnection  dropIndex(HsqlNameManager$HsqlName,  boolean)  indexArrayMap  clearIndexRoots()  getIndexRoot(HsqlNameManager$HsqlName,  boolean)  setIndexRoot(HsqlNameManager$HsqlName,  boolean,Node)  clearIndexRootsKeep()  indexArrayKeepMap  isClosed  isProcessingLog  isProcessingLog()  getAndClearWarnings()  sqlWarnings  addWarning(HsqlException)  setSQLMaxRows(int)  getMaxRows()  currentMaxRows  getSQLMaxRows()  sessionMaxRows |
| Select  [2] | Select\_new\_1  [-]  [-] | UNION  UNIONALL  NOUNION  EXCEPT  INTERSECT  sIntoTable  asteriskPositions  intoType  unionType  unionDepth  unionMaxDepth  prepareUnions()  getResultMain(Session)  resolveTablesUnion(TableFilter)  unionArray  havingCondition  Select()  isResolved  isResolved()  getValue(Session, int)  allColumnsAreDefinedIn(Expression,HashSet)  resolve(Session)  iHavingLen  iGroupLen  resultMetaData  isAggregated  groupColumnNames  isGrouped  unionSelect  tFilter  setFilterConditions(Session)  queryCondition  getResult(Session, int)  getSingleResult(Session, int)  mergeResults(Session,Result,Result)  inAggregateOrGroupByClause(Expression)  describe(Session)  buildResult(Session, int)  iResultLen  prepareResult(Session)  getDDL()  prepareSort()  describeResult()  resolveTables()  resolveAll(Session, boolean)  resolveUnionColumnTypes()  checkAggregateOrGroupByOrderColumns(int,  int)  getColumnAliases()  resolveTypes(Session)  exprColumns  isSimilarIn(Expression, int, int)  checkAggregateOrGroupByColumns(int, int)  resolveTables(TableFilter)  checkResolved(boolean)  isDistinctSelect |
| Select\_new\_2  [-]  [-] | sortUnion  limitCondition  getLimitStart(Session)  getLimitCount(Session, int)  getMaxRowCount(Session, int)  simpleLimit  iOrderLen  sortResult(Session,Result)  sortOrder  sortDirection |
| Expression  [3] | Expression\_new\_1  [-]  [-] | equals(Object,Object)  equals()  similarTo()  valueData  bind(Object)  canBeInAggregate()  isSelfAggregate()  aggregateSpec  isAggregate()  isDistinctAggregate  describe(Session)  isCompare(int)  INTEGER\_0  INTEGER\_1  SQL\_TRIM\_SPECIFICATION  SQL\_EXTRACT\_FIELD\_NAMES  static {}  findTableFilter(TableFilter[])  schema  isIdentity  isWritable  catalog  setTableColumnAttributes(Table, int)  setTableColumnAttributes()  precision  getColumnSize()  scale  getColumnScale()  nullability  PARAM\_UNKNOWN  TIMEZONE\_HOUR  OPEN  CONCAT  VAR\_SAMP  SOME  FUNCTION  NO\_NULLS  ALL  NULLABLE\_UNKNOWN  EVERY  CASE  BIGGER  END  TRIM  NOT  CAST  SELECT  AGGREGATE\_NONE  DOW  MAX  LEADING  SUM  ANY  SECOND  FOR  CONVERT  AND  PARAM\_OUT  DAY  FALSE  AS  STDDEV\_POP  CASEWHEN  PARAM  AGGREGATE\_SELF  OR  NEGATE  THEN  ALTERNATIVE  ASTERISK  QUERY  MINUTE  SUBTRACT  NULLIF  POSITION  SUBSTRING  LIMIT  AGGREGATE\_RIGHT  AGGREGATE\_FUNCTION  YEAR  FROM  NOT\_EQUAL  TRAILING  EXISTS  T\_TIMEZONE\_MINUTE  DISTINCT  EXTRACT  BIGGER\_EQUAL  ADD  MIN  BOTH  STDDEV\_SAMP  NULLABLE  PARAM\_IN\_OUT  AVG  VIEW  VAR\_POP  BETWEEN  HOUR  SEQUENCE  ENDWHEN  DIVIDE  IS\_NULL  WHEN  COUNT  COLUMN  MULTIPLY  AGGREGATE\_LEFT  EQUAL  COMMA  PARAM\_IN  PLUS  IS  CLOSE  VALUELIST  ELSE  COALESCE  IN  MONTH  isQueryCorrelated  hList  isFixedConstantValueList  isAggregate(int)  Expression(int,Object, boolean)  isParam  isParam()  paramMode  AGGREGATE\_BOTH  LIKE  getColumnNr()  columnIndex  outerFilter  IFNULL  SMALLER  ROW  SMALLER\_EQUAL  testCondition(Session)  getCheckSelect(Session,Table)  columnQuoted  isInJoin  valueList  likeObject  oldIType  subQuery  joinedTableColumnIndex  function  testExistsCondition(Session)  isAliasQuoted()  getTableName()  setTableName(String)  tableName  getColumnDDL()  getBaseColumnName()  isResolved()  getColumnName()  setColumnName(String, boolean)  columnName  getAlias()  collectColumnName(HashSet)  getType()  getContextDDL()  canBeInGroupBy()  exprType  setTrue()  TRUE  Expression(String,String,String)  Expression(String,String, boolean)  Expression(TableFilter,Column)  Expression(boolean)  Expression()  Expression(SubQuery)  Expression(Function)  Expression(NumberSequence)  Expression(int,Object)  Expression()  testInCondition(Session,Object)  getRightExpression()  setRightExpression()  getArg2()  eArg2  setLeftExpression()  getArg()  eArg  Expression(int)  Expression()  testAnyAllCondition(Session,Object)  getEquiJoinColumns(TableFilter, boolean[])  getAnyAllValue(Session,Object,SubQuery)  setForJoin(TableFilter, boolean)  collectAllColumnNames(HashSet)  setLikeOptimised()  checkAggregate()  isColumn()  isConstant()  swapCondition()  isConditional()  isFixedConditional()  isFixedConstant()  replaceAliases()  checkTables(HsqlArrayList)  checkResolved(boolean)  Expression()  resolveTables(TableFilter)  getDDL()  getAggregatedValue(Session,Object)  describe(Session, int)  getValue(Session)  similarTo()  test(Session)  resolveTypeForIn(Session)  updateAggregatingValue(Session,Object)  resolveTypeForLike(Session)  compareValues(Session,Object,Object)  setNull()  isTypeEqual()  getValueClassName()  valueClassName  getValue(Session, int)  VALUE  getDataType()  setDataType(int)  dataType  getCaseWhenType(Session)  setDistinctAggregate(boolean)  resolveTypes(Session)  collectInGroupByExpressions(HsqlArrayList)  canBeInOrderBy() |
| Expression\_new\_2  [-]  [-] | aliasQuoted  getExpressionForAlias()  setAlias(String, boolean)  columnAlias  getDefinedAlias()  isDescending()  setDescending()  isDescending |
| Expression\_new\_3  [-]  [-] | getTableSchemaName()  getFilterTableName()  getTableHsqlName()  tableFilter  getFilter() |
| jdbcConnection  [2] | jdbcConnection\_new\_1  [-]  [-] | finalize()  isNetConn  connProperties  isInternal  getURL()  close()  jdbcConnection(Session)  jdbcConnection(HsqlProperties)  rootWarning\_mutex  getWarnings()  rootWarning  addWarning(SQLWarning)  clearWarningsNoCheck()  clearWarnings()  rollback(Savepoint)  releaseSavepoint(Savepoint)  rollback()  setReadOnly(boolean)  getTransactionIsolation()  setAutoCommit(boolean)  setSavepoint(String)  getAutoCommit()  commit()  setTransactionIsolation(int)  sessionProxy  isReadOnly()  reset() |
| jdbcConnection\_new\_2  [-]  [-] | onStartEscapeSequence(String,StringBuffer, int)  nativeSQL(String)  prepareStatement(String, int[])  setTypeMap(Map)  prepareStatement(String,String[])  createStatement()  getCatalog()  getMetaData()  prepareStatement(String, int)  getTypeMap()  setCatalog(String)  setSavepoint()  prepareCall(String)  prepareStatement(String)  setHoldability(int)  getHoldability()  checkClosed()  isClosed  isClosed()  prepareCall(String, int, int)  prepareStatement(String, int, int)  createStatement(int, int)  prepareStatement(String, int, int, int)  prepareCall(String, int, int, int)  createStatement(int, int, int)  xlateRSHoldability(int)  xlateRSConcurrency(int)  xlateRSType(int) |
| jdbcResultSet  [3] | jdbcResultSet\_new\_1  [-]  [-] | updateRef(int,Ref)  cancelRowUpdates()  FETCH\_UNKNOWN  CLOSE\_CURSORS\_AT\_COMMIT  updateBoolean(String, boolean)  updateBoolean(int, boolean)  FETCH\_REVERSE  updateInt(int, int)  updateInt(String, int)  CONCUR\_UPDATABLE  updateRef(String,Ref)  getURL(int)  moveToCurrentRow()  updateClob(String,Clob)  insertRow()  updateRow()  refreshRow()  deleteRow()  getLong(int)  getLong(String)  getCursorName()  getURL(String)  CONCUR\_READ\_ONLY  getObject(int,Map)  getObject(String,Map)  updateDate(int,Date)  updateDate(String,Date)  TYPE\_FORWARD\_ONLY  updateArray(String,Array)  setFetchSize(int)  TYPE\_SCROLL\_SENSITIVE  updateNull(int)  updateNull(String)  getDouble(int)  getDouble(String)  moveToInsertRow()  getWarnings()  updateString(int,String)  updateString(String,String)  updateBigDecimal(int,BigDecimal)  updateBigDecimal(String,BigDecimal)  getBoolean(int)  getBoolean(String)  FETCH\_FORWARD  updateClob(int,Clob)  getInt(int)  getInt(String)  getShort(String)  getShort(int)  updateFloat(int, float)  updateFloat(String, float)  setFetchDirection(int)  rsType  getType()  updateObject(int,Object)  updateObject(String,Object)  updateBlob(String,Blob)  updateBlob(int,Blob)  updateBinaryStream(int,InputStream, int)  updateBinaryStream(String,InputStream, int)  updateByte(int, byte)  updateByte(String, byte)  getArray(String)  getArray(int)  clearWarnings()  getRef(int)  getRef(String)  updateShort(int, short)  updateShort(String, short)  getBigDecimal(String)  getBigDecimal(int)  updateTime(int,Time)  updateTime(String,Time)  getBigDecimal(int, int)  getBigDecimal(String, int)  HOLD\_CURSORS\_OVER\_COMMIT  TYPE\_SCROLL\_INSENSITIVE  updateArray(int,Array)  iColumnCount  checkColumn(int)  iUpdateCount  getUpdateCount()  connProperties  rsmd  getMetaData()  updateObject(int,Object, int)  updateObject(String,Object, int)  getByte(String)  getByte(int)  updateBytes(String, byte[])  updateBytes(int, byte[])  updateDouble(int, double)  updateDouble(String, double)  getFloat(String)  getFloat(int)  updateAsciiStream(String,InputStream, int)  updateAsciiStream(int,InputStream, int)  updateTimestamp(String,Timestamp)  updateTimestamp(int,Timestamp)  updateLong(int, long)  updateLong(String, long)  updateCharacterStream(int,Reader, int)  updateCharacterStream(String,Reader, int)  jdbcResultSetMetaData(jdbcResultSet,HsqlProperti  es)  init(jdbcResultSet,HsqlProperties)  rowInserted()  getFetchDirection()  rowDeleted()  rowUpdated()  getFetchSize()  getConcurrency()  getObject(String)  isNetConn  sqlStatement  getStatement()  autoClose  jdbcResultSet(jdbcStatement,Result,HsqlProperties,  boolean)  close()  bInit  findColumn(String)  checkClosed()  isResult()  rResult  nCurrent  getObject(int)  getColumnInType(int, int)  checkAvailable()  isBeforeFirst()  isAfterLast()  isLast()  afterLast()  first()  previous()  last()  next()  absolute(int)  relative(int)  beforeFirst()  isFirst()  getRow()  iCurrentRow |
| jdbcResultSet\_new\_2  [-]  [-] | getUnicodeStream(int)  getUnicodeStream(String)  getString(String)  getString(int)  getClob(String)  getClob(int)  getCharacterStream(String)  getCharacterStream(int)  getAsciiStream(int)  getAsciiStream(String) |
| jdbcResultSet\_new\_3  [-]  [-] | getTime(String)  getTime(int)  getTime(String,Calendar)  getTime(int,Calendar)  getDate(int,Calendar)  getDate(String,Calendar)  getDate(String)  getDate(int)  getTimestamp(String)  getTimestamp(int)  getTimestamp(String,Calendar)  getTimestamp(int,Calendar)  getBlob(int)  getBlob(String)  getBytes(String)  getBytes(int)  checkNull(Object)  wasNull()  bWasNull  getBinaryStream(int)  getBinaryStream(String) |
| Index  [2] | Index\_new\_1  [-]  [-] | MEMORY\_INDEX  DISK\_INDEX  POINTER\_INDEX  emptyIterator()  static {}  emptyIterator  getIterator(Session,Node)  isEmpty(Session)  lastRow(Session)  replace(Session,Node,Node)  next(Node)  set(Node, boolean,Node)  child(Node, boolean)  balance(Session,Node, boolean)  isConstraint()  isConstraint  isTemp  insert(Session,Row, int)  getRoot()  setRoot(Session,Node)  root  getRoot(Session)  getName()  indexName  setName(String, boolean)  onCommitPreserve  colCheck  useRowId  pkCols  pkTypes  table  isForward  getIndexOrderValue()  isUnique  isUnique()  getColumnTypes()  colTypes  collation  Index(Database,HsqlNameManager$HsqlName,Ta  ble, int[], int[], boolean, boolean, boolean, boolean,  int[], int[], boolean)  compareRowForInsert(Session,Row,Row)  findFirstRow(Session,Object, int)  findFirstRowNotNull(Session)  compareRowNonUnique(Session,Object[],  int[],Object[], int)  findFirstRow(Session,Object[], int)  colIndex  getVisibleColumns()  getColumns()  isNull(Object[])  getColumnNameList() |
| Index\_new\_2  [-]  [-] | hasReferencedRow(Session,Object[], int[],Index)  checkReferencedRows(Session,Table, int[],Index)  findRow(Session,Row)  search(Session,Row)  size(Session)  exists(Session,Object[], int[])  isNull(Object[], int[])  compareRows(Session,Object[],Object[], int[], int[])  compareRowNonUnique(Session,Object[],  int[],Object[])  findNotNull(Session,Object[], int[], boolean)  findFirstRow(Session,Object[], int[])  clearAll(Session)  sizeEstimate()  depth  firstRow(Session)  delete(Session,Node)  clearIterators()  updatableIterators  findFirstRowForDelete(Session,Object[], int[]) |
| Column  [2] | Column\_new\_1  [-]  [-] | hexToByteArray(String)  createSQLString(Object, int)  createSQLString(double)  createSQLString(String)  isPrimaryKey  isPrimaryKey()  setPrimaryKey(boolean)  Column()  columnName  identityStart  identityIncrement  isIdentity()  isIdentity  getSize()  colSize  isNullable()  isNullable  setNullable(boolean)  setIdentity(boolean, long, long)  duplicate(boolean)  setType()  Column(HsqlNameManager$HsqlName, boolean,  int, int, int, boolean,Expression)  getType()  getDIType()  getDITypeSub()  colType  getDefaultValue(Session)  getDefaultExpression()  setDefaultExpression(Expression)  defaultExpression  getDefaultDDL()  colScale  getScale() |
| Column\_new\_2  [-]  [-] | getCombinedNumberType(int, int, int)  getNumTypeWidth(int)  compare(Collation,Object,Object, int)  compareTo(byte[], byte[])  compareToTypeRange(Object, int)  checkChar(String, int, boolean)  checkVarchar(String, int, boolean)  convertString(String, int)  convertToDouble(Object)  enforceSize(Object, int, int, int, boolean)  tenPower  BIG\_DECIMAL\_1  MIN\_LONG  MAX\_LONG  convertToLong(Object)  static {}  MAX\_INT  convertToInt(Object)  MIN\_INT  BIG\_DECIMAL\_0  convertObject(Object, int)  convertObject(Session,Object, int, int, int)  multiply(Object,Object, int)  negate(Object, int)  add(Object,Object, int)  subtract(Object,Object, int)  concat(Object,Object)  divide(Object,Object, int) |
| TableSorter  [2] | TableSorter\_new\_1  [-]  -] | DESCENDING  NOT\_SORTED  ASCENDING  fireTableChanged(TableModelEvent)  getSortingStatus(int)  TableSorter(TableModel,JTableHeader)  fireTableDataChanged()  getTableHeader()  setTableHeader(JTableHeader)  tableHeader  sortingStatusChanged()  mouseListener  LEXICAL\_COMPARATOR  COMPARABLE\_COMPARATOR  setColumnComparator(Class,Comparator)  columnComparators  static {}  TableSorter()  isSorting()  sortingColumns  setSortingStatus(int, int)  getHeaderRendererIcon(int, int)  getDirective(int)  EMPTY\_DIRECTIVE  cancelSorting()  TableSorter(TableModel) |
| TableSorter\_new\_2  [-]  [-] | fireTableStructureChanged()  modelIndex(int)  getModelToView()  modelToView  clearSortingState()  tableModelListener  getComparator(int)  getViewToModel()  viewToModel  getValueAt(int, int)  isCellEditable(int, int)  setValueAt(Object, int, int)  getTableModel()  setTableModel(TableModel)  tableModel  getRowCount()  getColumnClass(int)  getColumnName(int)  getColumnCount() |
| Result  [2] | Result\_new\_1  [-]  [-] | rTail  isEmpty()  rRoot  getParameterData()  getSize()  size  addAll()  clear()  setRows()  sortResult(Session, int[], int[])  trimResult(int, int)  add(Object[])  setParameterData(Object[])  removeDuplicates(Session, int)  removeSecond(Session)  removeDifferent(Session)  append()  newExecuteDirectRequest(String)  write()  iterator()  getException()  exception  subSubString  sessionID  databaseID  removeDuplicates(Session)  getColumnCount()  setColumnCount(int)  significantColumns  compareRecord(Session,Object[],Object[], int)  compareRecord(Session,Object[],Object[], int[],  int[])  newSessionAttributesResult()  newParameterDescriptionResult(int)  getUpdateCounts()  newSingleColumnResult(String, int)  metaData  writeMulti(RowOutputBinary)  readMultiResult(RowInputBinary)  isUpdateCount()  getType()  setResultType(int)  isError()  mode  Result(int)  Result(int, int)  Result()  getSubString()  subString  getMainString()  setMainString(String)  mainString  Result(RowInputBinary)  Result(Throwable,String)  Result(String,String, int)  getStatementID()  setStatementID(int)  statementID  newPrepareResponse(int)  newFreeStmtRequest(int)  Result(int, int[], int)  write(RowOutputBinary)  isData()  read(RowInputBinary,DataInput) |
| Result\_new\_2  [-]  [-] | newReleaseSavepointRequest(String)  newRollbackToSavepointRequest(String)  newSetSavepointRequest(String)  setMaxRows(int)  setEndTranType(int)  setConnectionAttrType(int)  setStatementType(int)  getUpdateCount()  updateCount  getEndTranType()  getConnectionAttrType()  getStatementType() |
| DINameSpace  [2] | DINameSpace\_new\_1  [-]  [-] | classForMethodFQN(String)  iterateAllAccessibleMethods(Session, boolean)  iterateRoutineMethods(String, boolean)  getMethodFQN(Method)  iterateAccessibleTriggerClassNames(User)  listVisibleSessions(Session)  classForName(String)  getSchemaName(Object)  getCatalogName(Object)  catalogName  iterateCatalogNames()  DINameSpace(Database)  isReportCatalogs()  database  getInverseAliasMap()  getSignature(Method)  getMethodSpecificName(Method) |
| DINameSpace\_new\_2  [-]  [-] | addBuiltinToSet(HashSet)  isBuiltin(String)  static {}  isBuiltin(Class)  builtin |
| SqlFile  [2] | SqlFile\_new\_1  [-]  [-] | DEFAULT\_ELEMENT  RAW\_FALSE  RAW\_EMPTY  DEFAULT\_COL\_DELIM  DEFAULT\_NULL\_REP  DEFAULT\_HISTORY\_SIZE  JDBC3\_DATALINK  nonVarChars  pastName(String, int)  JDBC3\_BOOLEAN  COL\_EVEN  COL\_HEAD  DEFAULT\_SKIP\_PREFIX  COL\_ODD  SPACES  RAW\_DATA  ORACLE\_ELEMENT  DIVIDER  HSQLDB\_ELEMENT  SqlFile(boolean,Map)  spaces(int)  PRE\_TD  appendLine(StringBuffer,String)  LS  listMDSchemaCols  listMDIndexCols  listMDTableCols  oracleSysSchemas  DEFAULT\_ROW\_DELIM  static {}  historyPattern  slashHistoryPattern  substitutionPattern  ifwhilePattern  varsetPattern  foreachPattern  plPattern  DEFAULT\_CHARSET  specialPattern  revnum  genWinArgs(String)  wincmdPattern  loadBinary(File)  excludeSysSchemas  dsvRejectFile  dsvConstCols  dsvTargetTable  dsvRejectReport  nullRepToken  dsvRowDelim  maxHistoryLength  history  dsvColDelim  dsvSkipCols  dsvTargetFile  dsvSkipPrefix  pwDsv  D\_OPTIONS\_TEXT  fetchBinary  DSV\_M\_SYNTAX\_MSG  DSV\_X\_SYNTAX\_MSG  DSV\_OPTIONS\_TEXT  curLinenum  br  rawPrompt  file  primaryPrompt  contPrompt  nobufferYetString  silentFetch  lastSqlStatement  immCmdSB  magicPrefix  rawMode  RAW\_LEADIN\_MSG  prepareVar  binBuffer  fetchingVar  interactive  doPrepare  curConn  continueOnError  recursed  plMode  possiblyUncommitteds  stdprintln(String)  execute(Connection, boolean)  stdprint(String)  updateUserSettings()  charset  importDsv(String,String)  listTables(char,String)  displayResultSet(Statement,ResultSet, int[],String)  dsvSafe(String)  SqlFile(File, boolean,Map)  execute(Connection,PrintStream,PrintStream,Boole  an)  processSpecial(String)  historize()  setBuf(String)  processFromBuffer()  buffer  processBuffHist(String)  processSQL()  showHistory()  commandFromHistory(int)  historySearch(String)  streamToString(InputStream,String)  dump(File)  genRejectReportRecord(PrintWriter, int,  int,String,String,Throwable)  enforce1charSpecial(String, char)  enforce1charBH(String, char)  rb  dereference(String, boolean)  plBlockFile(String)  formatNicely(Map, boolean)  processPL(String)  dump(String,File)  load(String,File,String)  userVars  eval(String[])  deTerminated(String)  oldestHist  sqlTypeToString(int)  canDisplayType(int)  streamToBytes(InputStream)  pad(String, int, boolean, boolean)  divider(int)  describe(String,String)  psErr  psStd  errprintln(String)  errprint(String)  pwQuery  closeQueryOutputStream()  stdprint(String, boolean)  stdprintln(boolean)  stdprintln(String, boolean)  condlPrint(String, boolean)  condlPrintln(String, boolean)  htmlMode  PRE\_TR  htmlRow(int) |
| SqlFile\_new\_2  [-]  [-] | convertNumericEscapes(String)  convertNumericEscape(String, int)  convertEscapes(String)  convertEscapes(String,String,String) |
| Grid  [2] | Grid\_new\_1  [-]  [-] | update()  update(Graphics)  setLayout(LayoutManager)  add(Component)  repaint()  setCursor(Cursor)  iGridHeight  iXDrag  iColDrag  iGridWidth  createImage(int, int)  getMaxHeight(FontMetrics)  gImage  iFirstRow  fMetrics  iSbHeight  iImage  iSbWidth  fFont  iHeight  iY  sbHoriz  sbVert  iWidth  setBounds(int, int, int, int)  iX  mouseExit(Event, int, int)  bDrag  iRowHeight  handleEvent(Event)  mouseDrag(Event, int, int)  iColWidth  mouseMove(Event, int, int)  iColCount  iRowCount  adjustScroll()  paint(Graphics)  getHead()  sColHead  Grid()  calcAutoWidth(int)  setHead(String[])  addRow(String[])  getDisplay(int, int)  getData()  vData  get(int, int) |
| Grid\_new\_2  [-]  [-] | preferredSize()  getMinimumSize()  dMinimum  getPreferredSize()  minimumSize()  setMinimumSize(Dimension) |
| Tree  [2] | Tree\_new\_1  [-]  [-] | iFirstRow  update(Graphics)  addRow(String,String)  update()  setLayout(LayoutManager)  add(Component)  getMaxHeight(FontMetrics)  iTreeWidth  iTreeHeight  repaint()  createImage(int, int)  gImage  iImage  iSbWidth  iSbHeight  fFont  iIndentWidth  fMetrics  static {}  iX  iRowHeight  iWidth  iY  sbVert  sbHoriz  setBounds(int, int, int, int)  handleEvent(Event)  paint(Graphics)  adjustScroll()  mouseDown(Event, int, int)  vData  iMaxTextLength  addRow(String,String,String, int)  removeAll()  iRowCount  Tree()  iHeight |
| Tree\_new\_2  [-]  [-] | getPreferredSize()  dMinimum  setMinimumSize(Dimension)  getMinimumSize()  minimumSize()  preferredSize() |
| HsqlTimer  [2] | HsqlTimer\_new\_1  [ThreadFactory]  [-] | setPeriod(Object, long)  isFixedRate(Object)  getNextScheduled(Object)  isPeriodic(Object)  getLastScheduled(Object)  isFixedDelay(Object)  scheduleAt(Date,Runnable)  schedulePeriodicallyAt(Date, long,Runnable,  boolean)  HsqlTimer()  shutDown()  threadFactory  taskRunner  HsqlTimer(ThreadFactory)  nextTask()  shutdown()  addTask(long,Runnable, long, boolean)  isShutdown  taskQueue  restart()  newThread(Runnable)  compare(Object,Object)  clearThread()  getThread()  taskRunnerThread  shutdownImmediately() |
| HsqlTimer\_new\_2  [-]  [-] | cancel(Object)  isCancelled(Object)  scheduleAfter(long,Runnable)  now()  nowCount  static {}  schedulePeriodicallyAfter(long, long,Runnable,  boolean) |
| ServerConfiguration  [2] | ServerConfiguration\_new\_1  [-]  [-] | getPropertiesFromFile(String)  translateDefaultNoSystemExitProperty(HsqlProperties)  translateDefaultDatabaseProperty(HsqlProperties)  translateAddressProperty(HsqlProperties)  isEmpty(String) |
| ServerConfiguration\_new\_2  [-]  [-] | newDefaultProperties(int)  getDefaultPort(int, boolean)  listLocalInetAddressNames()  ServerConfiguration() |
| ArrayUtil  [2] | ArrayUtil\_new\_1  [-]  [-] | CLASS\_CODE\_OBJECT  CLASS\_CODE\_BYTE  haveEqualArrays(Object[],Object[], int)  CLASS\_CODE\_DOUBLE  ArrayUtil()  intIndexesToBooleanArray(int[], boolean[])  CLASS\_CODE\_LONG  CLASS\_CODE\_FLOAT  resizeArrayIfDifferent(Object, int)  findNot(int[], int)  clearArray(int,Object, int, int)  adjustArray(int,Object, int, int, int)  fillArray(Object[],Object)  copyColumnValues(Object[], int[],Object[])  find(byte[], int, int, int, int)  static {}  getClassCode(Class)  classCodeMap  fillSequence(int[])  copyColumnValues(int[], int[], int[])  findIn(byte[], int, int, byte[])  CLASS\_CODE\_CHAR  CLASS\_CODE\_BOOLEAN  haveCommonElement(int[], int[], int)  findNotIn(byte[], int, int, byte[])  copyAdjustArray(Object,Object,Object, int, int)  toAdjustedArray(Object,Object, int, int)  arraySlice(int[], int, int)  fillArray(int[], int)  CLASS\_CODE\_SHORT  duplicateArray(Object)  containsAllTrueElements(boolean[], boolean[])  commonElements(int[], int[])  countCommonElements(int[], int[])  countStartIntIndexesInBooleanArray(int[],  boolean[])  CLASS\_CODE\_INT  find(Object[],Object)  toAdjustedColumnArray(int[], int, int)  copyArray(Object,Object, int)  find(int[], int)  resizeArray(Object, int)  haveEqualArrays(int[], int[], int)  sortArray(int[])  haveEqualSets(int[], int[], int)  areEqualSets(int[], int[])  areEqual(int[], int[], int, boolean) |
| ArrayUtil\_new\_2  [-]  [-] | find(byte[], int, int, byte[])  countNonStartElementsAt(byte[], int, byte[])  countStartElementsAt(byte[], int, byte[])  containsAt(byte[], int, byte[])  countSameElements(byte[], int, byte[]) |