

Picture Layout Grammar

Start → CreateZooTablePuzzle | CreateStudentsTablePuzzle

Puzzle → CreateZooTablePuzzle | CreateStudentsTablePuzzle |
InsertIntoStudentsPuzzle | InsertIntoZooPuzzle | SelectFromZooPuzzle |
SelectFromStudentsPuzzle | DeleteFromStudentPuzzle | DeleteFromZooPuzzle
| TranquateZooPuzzle | TranquateStudentsPuzzle | DropTableZooPuzzle |
DropTableStudentPuzzle

CreateZooTablePuzzle → contain(CreateZooTablePuzzle, CreateZooTableText)
CreateZooTablePuzzle → below(CreateZooTablePuzzle, Puzzle)
CreateZooTablePuzzle → above(CreateZooTablePuzzle, Puzzle)

CreateStudentsTablePuzzle → contain(CreateStudentsTablePuzzle ,
CreateStudentsTableText)
CreateStudentsTablePuzzle → below(CreateStudentsTablePuzzle, Puzzle)
CreateStudentsTablePuzzle → above(CreateStudentsTablePuzzle, Puzzle)

InsertIntoStudentsPuzzle → contain(InsertIntoStudentsPuzzle ,
InsertIntoStudentsText)
InsertNameText → rightOf(Name, Text)
InsertAgeText → rightOf(Age, Num)
InsertClassText → rightOf(Class, Num)
InsertYearText → rightOf(Year, Num)
InsertNameAgeText → adjacent(InsertNameText , InsertAgeText)
InsertClassYearText → adjacent(InsertClassText , InsertYearText)
InsertAllText → adjacent(InsertNameAgeText, InsertClassYearText)
InsertIntoStudentsText → adjacent(Insert into Student values ,InsertAllText)
InsertIntoStudentsPuzzle → above(InsertIntoStudentsPuzzle , Puzzle)
InsertIntoStudentsPuzzle → below(InsertIntoStudentsPuzzle , Puzzle)

InsertIntoZooPuzzle → contain(InsertIntoZooPuzzle , InsertIntoZooText)
InsertNameText → rightOf(Name, Text)
InsertAgeText → rightOf(Age, Num)
InsertAllText → adjacent(InsertNameText , InsertAgeText)
InsertIntoZooText → adjacent(Insert into Student values ,InsertAllText)
InsertIntoZooPuzzle → above(InsertIntoZooPuzzle, Puzzle)
InsertIntoZooPuzzle → below(InsertIntoZooPuzzle, Puzzle)

SelectFromZooPuzzle → contain(SelectFromZooPuzzle , SelectFromZooText)
SelectDataText → rightOf(Select, Text)
SelectFromZooText → rightOf(From Zoo Where, Text)
SelectFromZooPuzzleText → adjacent(SelectDataText ,SelectFromZooText)
SelectFromZooPuzzle → above(SelectFromZooPuzzle, Puzzle)
SelectFromZooPuzzle → below(SelectFromZooPuzzle, Puzzle)

SelectFromStudentPuzzle → contain(SelectFromStudentPuzzle ,
SelectFromStudentText)
SelectDataText → rightOf(Select, Text)
SelectFromStudentText → rightOf(From table students where, Text)
SelectFromStudentPuzzleText → adjacent(SelectDataText
,SelectFromStudentText)
SelectFromStudentPuzzle → above(SelectFromStudentPuzzle, Puzzle)
SelectFromStudentPuzzle → below(SelectFromStudentPuzzle, Puzzle)

DeleteFromStudentPuzzle → contain>DeleteFromStudentPuzzle ,
DeleteFromStudentText)
DeleteText → rightOf>Delete From students Where, Text)
EqualText → rightOf(=,)
DeleteFromStudentPuzzle → above>DeleteFromStudentPuzzle , Puzzle)
DeleteFromStudentPuzzle → below>DeleteFromStudentPuzzle , Puzzle)\

DeleteFromZooPuzzle → contain>DeleteFromZooPuzzle , DeleteFromZooText)

DeleteText → rightOf>Delete From zoo Where, Text)

EqualText → rightOf(=,)

DeleteFromZooPuzzle → above>DeleteFromZooPuzzle, Puzzle)

DeleteFromZooPuzzle → below>DeleteFromZooPuzzle , Puzzle)

TranquateZooPuzzle → contain>TranquateZooPuzzle ,TranquateZooText)

TranquateZooPuzzle → below>TranquateZooPuzzle , Puzzle)

TranquateZooPuzzle → above>TranquateZooPuzzle , Puzzle)

TranquateStudentsPuzzle → contain>TranquateStudentsPuzzle
,TranquateStudentsText)

TranquateStudentsPuzzle → below>TranquateStudentsPuzzle , Puzzle)

TranquateStudentsPuzzle → above>TranquateStudentsPuzzle , Puzzle)

DropTableZooPuzzle → contain>DropTableZooPuzzle ,DropTableZooText)

DropTableZooPuzzle → below>DropTableZooPuzzle, Puzzle)

DropTableZooPuzzle → above>DropTableZooPuzzle, Puzzle)

DropTableStudentsPuzzle → contain>DropTableStudentsPuzzle
,DropTableStudentsText)

DropTableStudentsPuzzle → below>DropTableStudentsPuzzle , Puzzle)

DropTableStudentsPuzzle → above>DropTableStudentsPuzzle , Puzzle)