

Ordus Data Model

English	CyCL	SQL
Ordus' is a country.	(# \$isa # \$Ordus # \$Country)	CREATE TABLE country (countryid INT, name TEXT); INSERT INTO country VALUES (1,'Ordus')
Department is an organization.	(# \$genls # \$Department # \$Organization)	CyCL only
Department of internal affairs is a department.	(# \$isa # \$DepartmentOfInternalAffairs # \$Department)	CREATE TABLE dept (deptid INT, name TEXT, branch TEXT, field_of_work TEXT); INSERT INTO dept (deptid, name) VALUES (1,'Department of Internal Affairs')
Department of ethical supervision is a department.	(# \$isa # \$DepartmentOfEthicalSupervision # \$Department)	INSERT INTO dept (deptid,name) VALUES (2,'Department of Ethical Supervision')
Field of work of department of internal affairs is protection of citizens against criminals.	(# \$fieldOfWork # \$DepartmentOfInternalAffairs "Protection of citizens against criminals")	UPDATE dept SET field_of_work='Protection of citizens against criminals' WHERE deptid=1
Field of work of department of ethical supervision is ensuring that the laws of Ordus' are followed by its subjects.	(# \$fieldOfWork # \$DepartmentOfEthicalSupervision "Ensuring that the laws of Ordus are followed by its subjects")	UPDATE dept SET field_of_work='Ensuring that the laws of Ordus are followed by its subjects' WHERE deptid=2
A civil servant is a person.	(# \$genls # \$CivilServant # \$Person)	CyCL only
Given names of Rededya Alimagomedov are <i>Rededya Peresvetovich</i> .	(# \$givenNames # \$RededyaAlimagomedov "Rededya Peresvetovich")	CREATE TABLE emp (empid INT, fname TEXT, mname TEXT, lname TEXT, deptid INT, boss INT NULL, field_of_work TEXT); INSERT INTO emp (empid,fname,mname) VALUES (1,'Rededya','Peresvetovich')
Family name of Rededya Alimagomedov is <i>Alimagomedov</i> .	(# \$familyName # \$RededyaAlimagomedov "Alimagomedov")	UPDATE emp SET lname='Alimagomedov' WHERE empid=1
Given name of Bagatur Lobo is <i>Bagatur</i> .	(# \$givenNames # \$BagaturLobo "Bagatur")	INSERT INTO emp (empid,fname) VALUES (2,'Bagatur')
Family name of Bagatur Lobo is <i>Lobo</i> .	(# \$familyName # \$BagaturLobo "Lobo")	UPDATE emp SET lname='Lobo' WHERE empid=2

Bagatur Lobo is subordinate of Rededya Alimagomedov.	(#\$superiors #\$RededyaAlimagomedov #\$BagaturLobo)	UPDATE emp SET boss=1 WHERE empid=2
Field of work of Bagatur Lobo is finding and catching criminals.	(#\$fieldOfWork #\$BagaturLobo "Finding and catching criminals")	UPDATE emp SET field_of_work='Finding and catching criminals' WHERE empid=2
Given names of Mokii Nilovich Rabinovich are <i>Mokii Nilovich</i> .	(#\$givenNames #\$MokiiNilovichRabinovich "Mokii Nilovich")	INSERT INTO emp (empid, fname, mname) VALUES (3, 'Mokii', 'Nilovich')
Family name of Mokii Nilovich Rabinovich is <i>Rabinovich</i> .	(#\$familyName #\$MokiiNilovichRabinovich "Rabinovich")	UPDATE emp SET lname='Rabinovich' WHERE empid=3
Given names of Bogdan Rukhovich Ouiantsev-Su are <i>Bogdan Rukhovich</i> .	(#\$givenNames #\$BogdanRukhovichOuiantsevSu "Bogdan Rukhovich")	INSERT INTO emp (empid, fname, mname) VALUES (4, 'Bogdan', 'Rukhovich')
Family name of Bogdan Rukhovich Ouiantsev-Su is <i>Ouiantsev-Su</i> .	(#\$familyName #\$BogdanRukhovichOuiantsevSu "Ouiantsev-Su")	UPDATE emp SET lname='Ouiantsev-Su' WHERE empid=4
Field of work of Bogdan Rukhovich Ouiantsev-Su is legal advice to Bagatur Lobo.	(#\$fieldOfWork #\$BogdanRukhovichOuiantsevSu "Legal advice to Bagatur Lobo")	UPDATE emp SET field_of_work='Legal advice to Bagatur Lobo' WHERE empid=4
Bogdan Rukhovich Ouiantsev-Su is subordinate of Mokii Nilovich Rabinovich.	(#\$superiors #\$MokiiNilovichRabinovich #\$BogdanRukhovichOuiantsevSu)	UPDATE emp SET boss=3 WHERE empid=4
Head of department of internal affairs is Rededya Alimagomedov.	(#\$headOfDepartment #\$DepartmentOfInternalAffairs #\$RededyaAlimagomedov)	UPDATE dept SET head=1 WHERE deptid=1
Head of department of ethical supervision is Mokii Nilovich Rabinovich.	(#\$headOfDepartment #\$DepartmentOfEthicalSupervision #\$MokiiNilovichRabinovich)	UPDATE dept SET head=3 WHERE deptid=2
Mokii Nilovich Rabinovich is a civil servant.	(#\$isa #\$MokiiNilovichRabinovich #\$CivilServant)	UPDATE emp SET deptid=2 WHERE empid=3; UPDATE dept SET branch='civil'

Asking Questions

English	CycL	SQL
What countries are there?	(#\$isa ?COUNTRY #\$Country)	SELECT * FROM country

What departments are there?	(# $\$$ isa ?DEPARTMENT # $\$$ Department)	SELECT * FROM dept
What civil servants are there?	(# $\$$ isa ?CIVIL_SERVANT # $\$$ CivilServant)	SELECT e.* FROM emp e, dept d WHERE e.deptid=d.deptid AND d.branch='civil'
Tell me all departments and their heads.	(# $\$$ headOfDepartment ?HEAD_OF_DEPARTMENT ?DEPARTMENT)	SELECT d.name, e.* FROM dept d, emp e WHERE d.head=e.empid
Who is Mokii Nilovich Rabinovich?	(# $\$$ isa # $\$$ MokiiNilovichRabinovich ?PROPERTY)	SELECT e.*,d.* FROM emp e, dept d WHERE e.deptid=d.deptid AND e.empid=3
Tell me the names of all civil servants with subordinates.	(# $\$$ superiors ?BOSS ?SUBORD)	SELECT e1.fname, e1.mname, e1.lname FROM emp e1, emp e2, dept d WHERE e1.deptid=d.deptid AND d.branch='civil' AND e1.empid=e2.boss
Who is the boss of Bagatur Lobo?	(# $\$$ superiors ?BOSS # $\$$ BagaturLobo)	SELECT e2.fname, e2.mname, e2.lname FROM emp e1, emp e2 WHERE e1.empid=2 AND e1.boss=e2.empid