

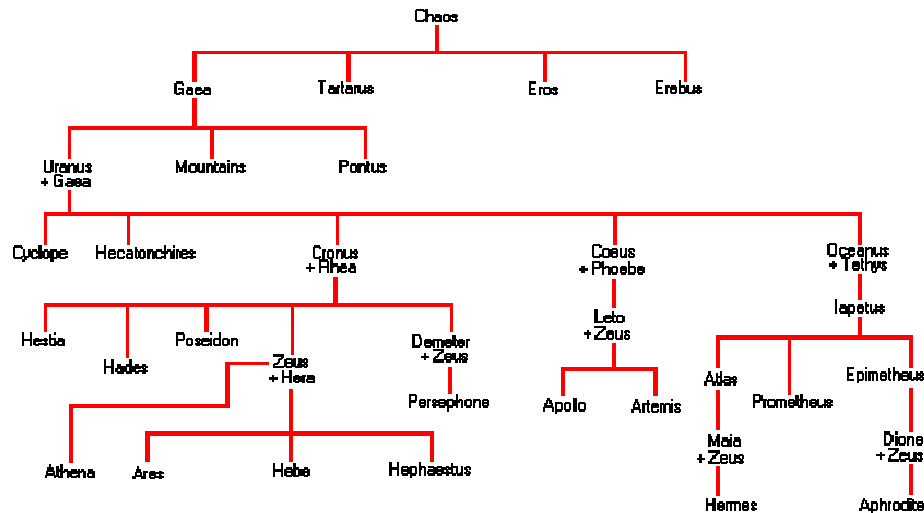
: (Prolog)
 : - 2014-15
 : . , .

1:

Prolog

Prolog (clauses)

- **(atoms)**
 - ◇ (integers) (float)
 - ◇ **(symbols)**, —, . .
 - george*
 - mary*
 - socrates*
 - john_Lennon*
 - car25*
 - ◇ **(strings)**, double quotes, . . "Hello", "This is a dog", "John", "Mary", .
 - ◇ , :-, =, >, !, < .
- **(Compound terms)**, . . .
 - student(george, papadakis),*
 - address(student (george,papadakis), thessaloniki, adr(gravias, 16)*
 - (lists)** (
 - ,), .
 - , . .
 - [a, b, c]*
 - [john, mary, jim, edward, elen]*
 - [a, [b, c]]*
 - [[a, b], c]*
- **(variables)** —
 - . .
 - X*
 - Answer*
 - Input*
 - _3_blind_mice*
 - , . . Java C, Prolog
 - (facts)**
 - (rules).**, Prolog
 - :



```

parent(cronus,hestita).
parent(cronus,hades).
parent(cronus,poseidon).
parent(cronus,zeus).
parent(cronus,demeter).
parent(rhea,hestita).
parent(rhea,hades).
parent(rhea,poseidon).
parent(rhea,zeus).
parent(rhea,demeter).
parent(zeus,athena).
parent(zeus,ares).
parent(zeus,hebe).
parent(zeus,hephaestus).
parent(zeus,persephone).
parent(hera,athena).
parent(hera,ares).
parent(hera,hebe).
parent(hera,hephaestus).
parent(demeter,persephone).

```

```

male(cronus).
male(hades).
male(poseidon).
male(zeus).
male(ares).
male(hephaestus).

```

```

female(rhea).
female(hestita).
female(hera).
female(demeter).
female(persephone).
female(athena).
female(hebe).

```

```

diff(X,Y) :- % ΠΡΟΣΟΧΗ: Δύο διαφορετικές μεταβλητές μπορούν
              X \= Y. % να έχουν την ίδια τιμή.

```

male(zeus).

female(persephone).

zeus persephone

male() female()

(.).

.. :

son(X,Y) :-

male(X),

parent(Y,X).

X.

X () Y
son(X,Y)

X () Y
male(X)

parent(Y,X).

(AND).

parent(X,Y) :-
father(X,Y).

parent(X,Y) :-
mother(X,Y).

, () X
X () Y.

() Y

X () Y,

(OR).

Prolog
Prolog

Prolog

?- parent(X, zeus).

Prolog :

X = cronus

(yes) (no), ..

?- parent(rhea, zeus).

Yes

?- parent(zeus, poseidon).

No

- 1) SWI-Prolog. , « »
<http://www.swi-prolog.org/> → Download
- 2) **editor** Prolog , .. gods.pl.
- 3) SWI-Prolog .
 «gods.pl»
- 4) gods.pl
 father(X,Y) ,
 mother(X,Y) ,
 son(X,Y) ,
 daughter(X,Y) ,
 grandfather(X,Y) ,
 grandmother(X,Y) ,
 brother(X,Y) ,
 sister(X,Y) ,
 aunt(X,Y) ,
 uncle(X,Y) .
- 5) SWI-Prolog .
File → Reload modified files. Prolog.
 ;
 • ; :
 • ; :
 • ; :