Given the following definition of the predicate minimum/2

minimum(List, Min) :-

      member(Min, List),

      not((member(X, List), X < Min)).

select correct prolog answer to this query:

?- minimum([2,1,3], X).

o false

◉ X = 1

o X = 2

o X = 3

Given the following definition of the predicate minimum/2

minimum(List, Min) :-

      member(Min, List),

      not((member(X, List), X < Min)).

How many solutions exist to this query?

?- minimum([2,1,3], X).

1

?- minimum([2,1,3,1], X).

2

Given the following definition of the predicate minimum/2

```
minimum(List, Min) :-
        member(Min, List),
        not((member(X, List), X < Min)).
```

select correct prolog interpreter dialogs

?- minimum([2,1,3,1], X).

❑ false.

▣ X = 1 .

❑ X = 1 ;
  false.

❑ X = 1 ;
  X = 1 ;
  false.

▣ X = 1 ;
  X = 1.

Given the following definition of the predicate minimum/2

minimum(List, Min) :-
      member(Min, List),
      not((member(X, List), X < Min)).

select correct prolog interpreter dialogs

?- minimum([2,1,3,1,2], X).

❑ false.

◾ X = 1 .

❑ X = 1 ;
  false.

◾ X = 1 ;
  X = 1 .

◾ X = 1 ;
  X = 1 ;
  false.

Given the following definition of the predicate factorial/2

factorial(0,1).

factorial(N,F) :-

        factorial(N1, F1),

        N is N1 + 1, F is N*F1.

write how prolog will answer this query:

?- factorial(3, X).

X = 6

?- factorial(X, 6).

X = 3

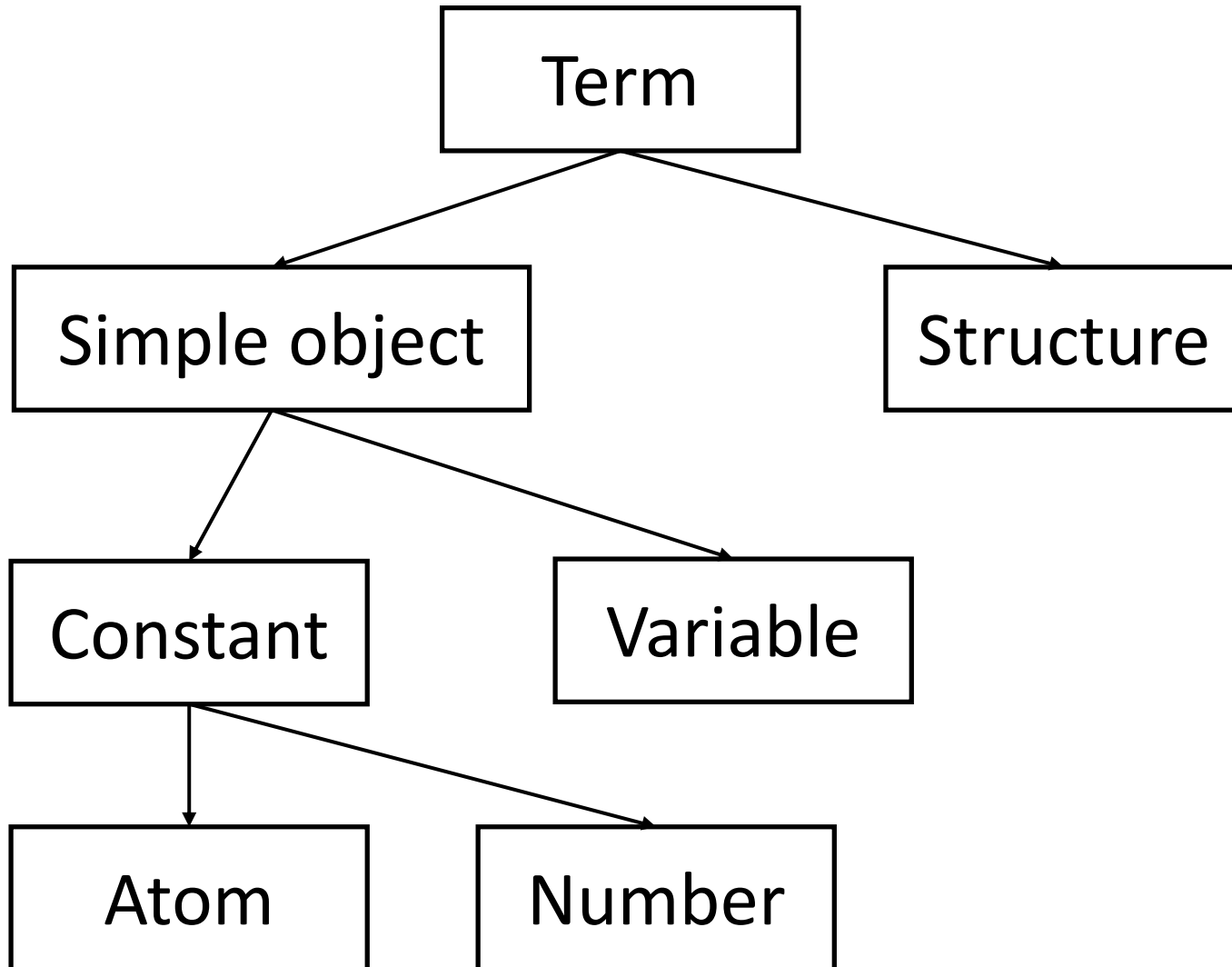?- factorial(X, 5040).

X = 7

?- factorial(X, 4968).

○ X = 5

○ X = 6.9

○ X = 7

○ false.

◉ infinite loop

2

Prolog data types

Which of the following sequences of characters are variables?

- ❑ vINCENT
- ▣ Footmassage
- ❑ variable23
- ▣ Variable2000
- ❑ big_kahuna_burger
- ❑ 'big kahuna burger'
- ❑ big kahuna burger
- ❑ 'Jules'
- ▣ _Jules
- ❑ '_Jules'

Given the following facts
parent(samoslav, mojmir).   parent(samoslav, vseslav).
parent(vseslav, rastislav).   parent(vseslav, semidrag).
parent(semidrag, svatopluk). parent(semidrag, semizizen).
parent(rodana, svatopluk).   parent(rodana, semizizen).

ask prolog the following:
Is mojmir parent of samoslav?
parent(mojmir, samoslav).

Is mojmir a parent?
parent(mojmir, X). or parent(mojmir, _).

Who is samoslav's child?
parent(samoslav, Child).

Given the following facts
parent(samoslav, mojmir).   parent(samoslav, vseslav).
parent(vseslav, rastislav).   parent(vseslav, semidrag).
parent(semidrag, svatopluk). parent(semidrag, semizizen).
parent(rodana, svatopluk).   parent(rodana, semizizen).

how will prolog answer this query (first solution):
?- parent(vseslav, C), parent(C, CC).
C = semidrag, CC = svatopluk.

ask the following:
Who is grandparent of svatopluk?
❑ parent(svatopluk, P), parent(P, GP).
❑ parent(P, GP), parent(svatopluk, P).
▣ parent(GP, C), parent(C, svatopluk).
▣ parent(C, svatopluk), parent(GP, C).

```
woman(kate).
woman(maria).
man(paul).
person(X):- man(X).
person(X):- woman(X).
loves(X,Y):- father(X,Y).
father(Y,Z):- man(Y), son(Z,Y).
father(Y,Z):- man(Y), daughter(Z,Y).
```

How many facts are there in the above program?

3

How many rules are there in the above program?

5

How many clauses are there in the above program?

8

How many predicates are there in the above program?

5

Represent the following in Prolog:

- Butch is a killer.

killer(butch).

- Mia and Marsellus are married.

married(mia, maresullus).

- Marsellus kills everyone who gives Mia a footmassage.

kills(marsellus,X):- footmassages(X, mia).

- Mia loves everyone who is a good dancer.

loves(mia, X):- good_dancer(X).

- Jules eats anything that is nutritious or tasty.

eats(jules, X):- food(nutritious, X).
eats(jules, X):- food(tasty, X).