Programming languages - U11

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partition example

```
lt(X,Y) :- Y<X.

?- partition(lt(3),[0,1,2,3,4,5,6],L,H).
L = [0, 1, 2],
H = [3, 4, 5, 6].
```

grammar rules

```
article --> [a].
article --> [the].
noun --> [girl].
noun --> [boy].
pronoun --> [that].
pronoun --> [this].
auxiliary --> [is].

sentence --> subject_predicate.
sentence --> subject_predicate_object.

subject --> article, noun.
subject --> pronoun.

predicate --> auxiliary.
predicate --> verb.

object --> article, noun.

subject_predicate --> subject, verb_sleep.
verb_sleep --> [sleeps].

subject_predicate_object --> pronoun, auxiliary, object.
subject_predicate_object --> article, noun, verb_likes, object.
verb_likes --> [likes].
```

```
verb --> verb_likes.
verb --> sleep.
```

try with the above grammar (this is the input + output)

```
?-  sentence([this, is, a, sleeps],[]).
false.

?-  sentence([this, is, a, likes],[]).
false.

?-  sentence([the, boy, likes],[]).
false.

?-  sentence([that, boy, likes],[]).
false.

?-  sentence([a, boy, the, the, girl],[]).
false.

?-  sentence([this, is, a, boy],[]).
true.

?-  sentence([that, is, the, girl],[]).
true.

?-  sentence([the, girl, likes, a, girl],[]).
true.
```