Use our phrase structure rules to parse the following sentences.

1. Sally’s dog should have eaten the table.

   IP
   ┌────────┐
   │        │
   │  DP    │  I  │
   │        │    │
   │  DP    │  I  │  VP  │
   │        │    │    │
   │    DP  │  D  │  NP  │  should  │  V  │
   │        │    │    │    │    │
   │  Sally │  D  │  NP  │  N  │  V  │  VP  │
   │        │    │    │    │    │    │
   │  s  N  │  N  │  have  │  V  │
   │        │    │    │    │    │
   │  N  N  │  N  │
   │        │    │
   │  dog  │  N  │
   │        │    │
   │  V  DP  │
   │        │    │
   │  eaten  │
   │        │
   │  D  NP  │
   │        │    │
   │  the  N  │
   │        │    │
   │  N  N  │
   │        │    │
   │  table  │
2. The fact that Sally yelled means that she could be angry.
3. Every child should listen to Mary's mother's advice.
Each of the following strings can be parsed in exactly two ways. For each, give those two parses.

1. Mary’s letter and email about Peter will be published in the paper.

```
[Diagram of two parse trees for the sentence]
```
Actually, there are two more parses, which I didn’t see when I made up this assignment. They are just like the previous two, except the PP in the paper is the V headed by be. I’ve shown these two parses below.

```
IP
  DP
    DP
      Mary
      D
      NP
    IP
      I
      VP
        V
        PP
          N
          and
          N
          PP
          be
          V
          P
          DP
          N
          P
          V
          in
          DP
          N
          P
          published
          D
          NP
            N
            to
            Peter
            N
            paper
```
1. Every bad idea can lead down a blind alley or enlighten us after much discussion.
every bad idea and lead down us much

discussion

blind
2. Mary's letters and terrible emails will be published in the paper.
I missed two additional parses for this sentence too. These two additional parses are just like the two I've given, but the PP *in the paper* is in the \( \overline{V} \) headed by *be*. They look like this:

```
I

\[\text{IP} \rightarrow \text{DP} \rightarrow \text{I} \rightarrow \text{VP}
\]

\[\text{IP} \rightarrow \text{DP} \rightarrow \text{I} \rightarrow \text{VP}
\]

\[\text{DP} \rightarrow \text{Mary} \rightarrow \text{D} \rightarrow \text{NP} \rightarrow \text{DNP} \rightarrow \text{V} \rightarrow \text{VP} \rightarrow \text{P}
\]

\[\text{DP} \rightarrow \text{Mary} \rightarrow \text{D} \rightarrow \text{NP} \rightarrow \text{DNP} \rightarrow \text{V} \rightarrow \text{VP} \rightarrow \text{P}
\]

\[\text{DP} \rightarrow \text{letter} \rightarrow \text{A} \rightarrow \text{N} \rightarrow \text{V} \rightarrow \text{in} \rightarrow \text{DP}
\]

\[\text{DP} \rightarrow \text{letter} \rightarrow \text{A} \rightarrow \text{N} \rightarrow \text{V} \rightarrow \text{in} \rightarrow \text{DP}
\]

\[\text{AP} \rightarrow \text{terrible} \rightarrow \text{emails} \rightarrow \text{published} \rightarrow \text{D} \rightarrow \text{NP}
\]

\[\text{AP} \rightarrow \text{terrible} \rightarrow \text{emails} \rightarrow \text{published} \rightarrow \text{D} \rightarrow \text{NP}
\]

\[\text{NP} \rightarrow \text{the} \rightarrow \text{N}
\]

\[\text{NP} \rightarrow \text{the} \rightarrow \text{N}
\]

\[\text{NP} \rightarrow \text{paper}
\]

\[\text{NP} \rightarrow \text{paper}
\]
1. The problems seemed obvious to Peter.
The following sentence has three parses. Give them all.

1. She ate the mouse and butterfly on the table.
She past the table

eat the mouse and butterfly on the table
There are two more parses that look very much like the second and third in this list. They differ from those in conjoining not Ns, but the Ns inside. They look like this:

```
IP
  DP  I
    |  VP
    D  past  V
  She  V  DP
    |  D
    eat  NP
        |  N
        the  PP
        N  P
        N  N
        and  N  P  DP
        N  N  N
        N  N  N  N
        and  and  on  DP
        N  N  N
        N  N
        N  N
        mouse  butterfly  on  D
        D  NP
        the  N
        N  N
        N  N
        table  butterfly  on  D
        D  NP
        the  N
        N  N
        N  N
        N  N
        mouse  butterfly  on  D
        D  NP
        the  N
        N  N
        N  N
        N  N
        table
```