

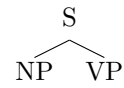
# Naive Top-down Parsing

S

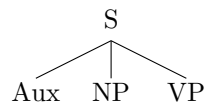
S

## Expand S

1.



2.

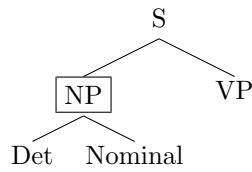


3.

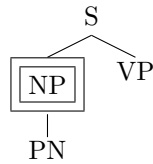


## Expand NP

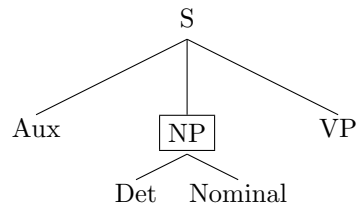
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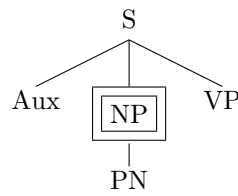
2.



3.



4.

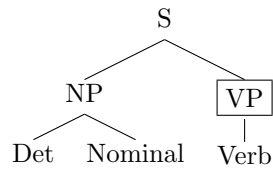


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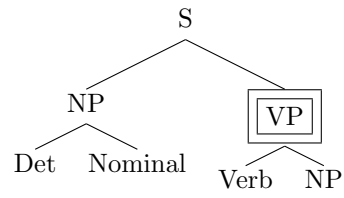


## Expand VP

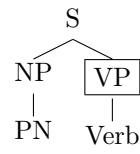
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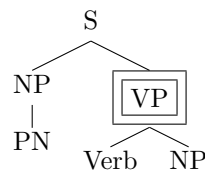
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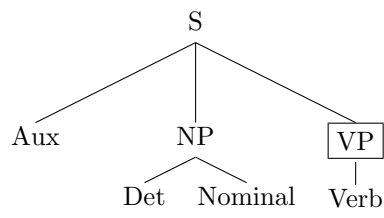
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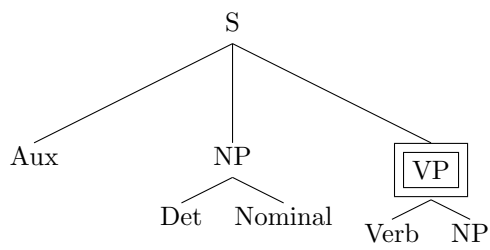
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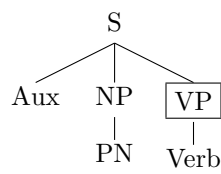
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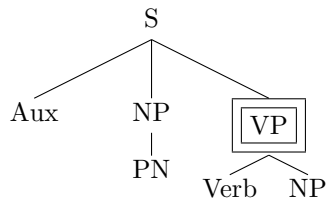
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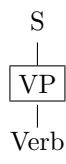
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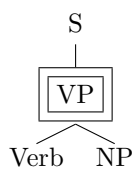
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9.

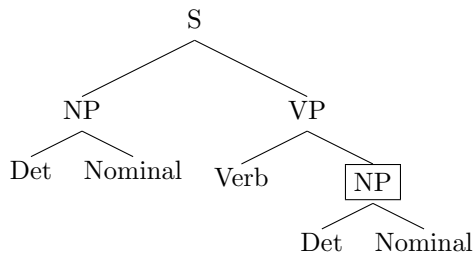


10.

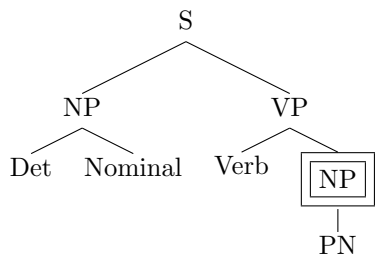


**Expand NP inside VP**

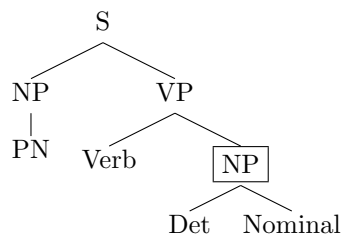
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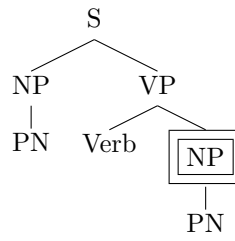
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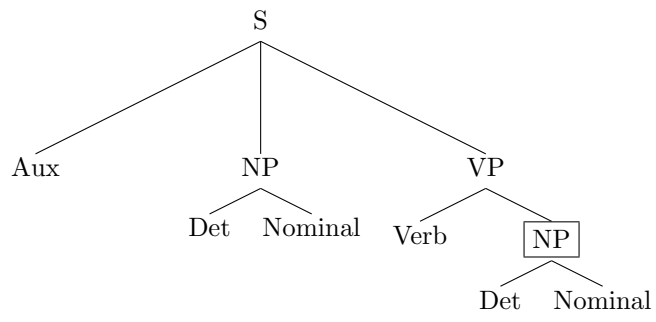
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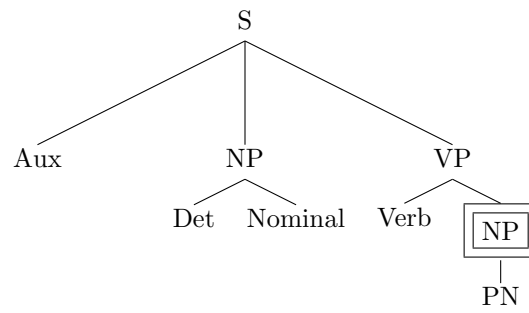
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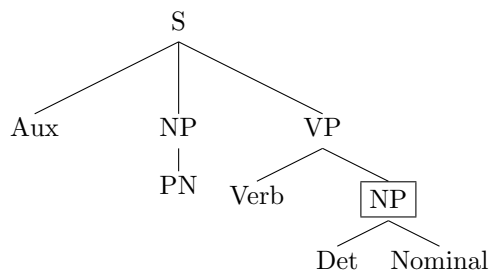
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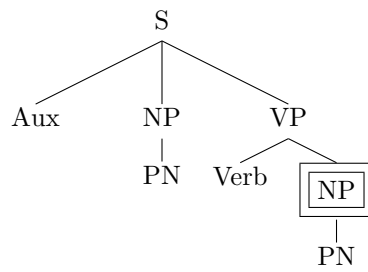
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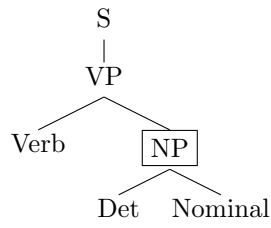
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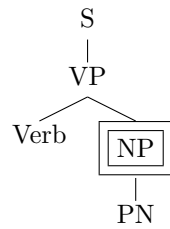
8.



9.



10.



## Naive Bottom-up Parsing

**Input String** book that flight

**Lexical Categories**

- Noun  
|  
book
- Det  
|  
that
- Noun  
|  
flight
- Verb  
|  
book
- Det  
|  
that
- Noun  
|  
flight

**NOM**

- NOM  
|  
Noun  
|  
book
- Det  
|  
that
- NOM  
|  
Noun  
|  
flight
- Noun  
|  
book
- Det  
|  
that
- NOM  
|  
Noun  
|  
flight

- |      |
|------|
| NOM  |
|      |
| Noun |
|      |
| book |

Det
that

Noun
flight
- |      |
|------|
| Verb |
|      |
| book |

Det
that

NOM
Noun
flight

**NP**

- |      |
|------|
| NOM  |
|      |
| Noun |
|      |
| book |

NP
Det    NOM
that   Noun
flight
- |      |
|------|
| Noun |
|      |
| book |

NP
Det    NOM
that   Noun
flight
- |      |
|------|
| Verb |
|      |
| book |

NP
Det    NOM
that   Noun
flight

**VP**

- |                  |
|------------------|
| VP               |
|                  |
| Verb    NP       |
| /  \             |
| book   Det   NOM |
|                  |
| that   Noun      |
|                  |
| flight           |

