

## What's wrong with this grammar?

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4	$B \rightarrow B b$
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Strangely: this grammar is **not considered invalid**, but it isn't a **reduced grammar**.  
(In much the same way as **finite automatas with dead or unreachable states** are still considered valid FAs.)

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From this you can infer what it means to “reduce” a grammar, and what the query “Is grammar  $G(N, \Sigma, P, S)$  reduced?” asks.