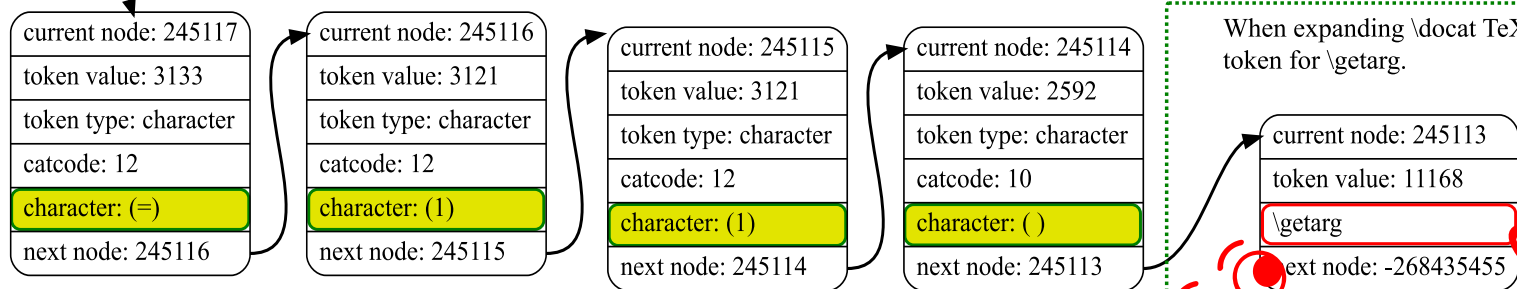
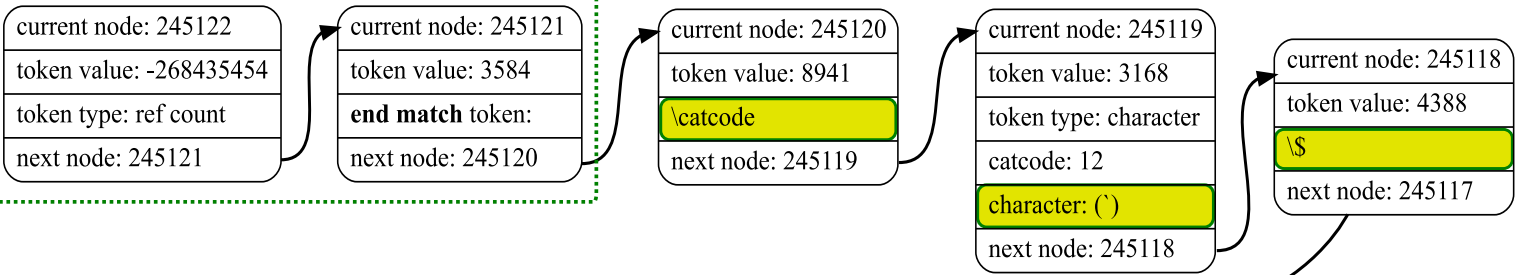


Expanding \docat

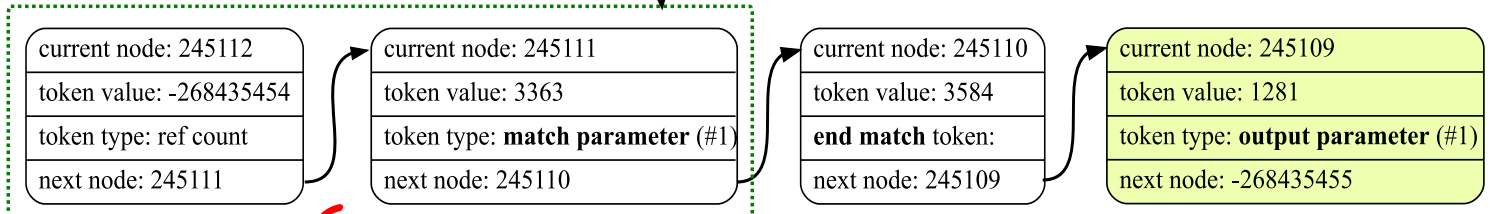
TeX looks up \docat and sees that the very first token in the <parameter text> is the **end match** token. TeX now knows \docat **does not** take any parameters, so go ahead and expand it by reading the <replacement text> tokens. There is no need to read the user's input because no argument tokens are used/required.

expanding \docat: read/action tokens stored in the <replacement text>



When expanding \docat TeX finds the token for \getarg.
Aha! A token that is a command. Look it up and see that it is a macro (\getarg) so we'll go ahead and expand it!

Expanding \getarg

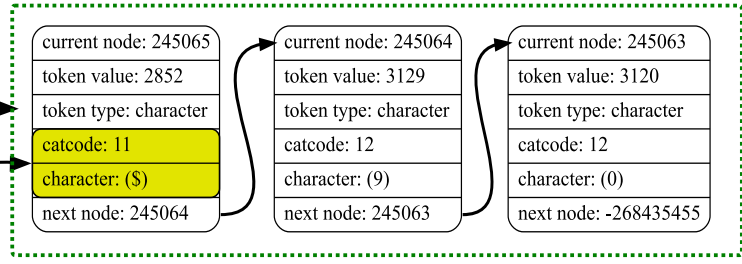


Aha! The first token in the <parameter text> for \getarg is not the **end match** token. So, we'd better read the user's argument tokens from the input to create a token list from them.

Aha! When reading the <replacement text> for \getarg TeX sees an **output parameter** token. So, it is time to "insert" the user's argument tokens for this parameter.

{\\$90}

token list for \$90 created by \getarg



The \$ now has a category code of 11 because \docat made the category code change before the argument of \getarg became tokenized.