

RGPV 2020

How can we construct regular grammar from regular expression?

Ans. Lets take an regular expresion example: $0^*(1(0+1))^*$

Now convert above example in to regular language.

$0^*(1(0+1))^*$

Conver above regular expression into Right linear regular grammar in step by step.

Step 01:

$S \rightarrow 0S$

Step 02:

$S \rightarrow 0S \mid A \mid \epsilon$

Step 03:

$S \rightarrow 0S \mid A \mid \epsilon$

$A \rightarrow 1B$

Step 04:

$S \rightarrow 0S \mid A \mid \epsilon$

$A \rightarrow 1B$

$B \rightarrow 0A \mid 1A \mid 0 \mid 1$

Conver above regular expression into Left linear regular grammar in step by step.

Step 01:

$S \rightarrow A \mid \epsilon$

Step 02:

$S \rightarrow A \mid \epsilon$

$A \rightarrow A10 \mid A11 \mid B$

Step 03:

$S \rightarrow A \mid \epsilon$

$A \rightarrow A10 \mid A11 \mid B$

$B \rightarrow B0 \mid 0$

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