

编译原理第八次理论作业

18340052 何泽

Given the translation scheme for the EQN language (see pp.40 in this lecture), calculate the height and depth of the input:

text sub text sub text.

Suppose that for each **text**,

- $\text{getHeight}(\text{ps}, \text{text.lexval}) = 8 * \text{ps}$
- $\text{getDepth}(\text{ps}, \text{text.lexval}) = 0$

$\text{text1.ps}=10 \text{ text1.ht}=80 \text{ text1.dp}=0$

$\text{text2.ps}=7 \text{ text2.ht}=56 \text{ text2.dp}=0$

$\text{text3.ps}=7 \text{ text3.ht}=56 \text{ text3.dp}=0$

将前面的text sub text当作B1,则 $B1.ps=10 \ B1.ht=\max(80,56-2.5)=80, B1.dp=\max(0,10*0.25)=2.5$

则此时text3为B2, 最后的结果 $B.ps=10 \ B.ht=\max(80,56-2.5)=80 \ B.dp=\max(2.5,0+2.5)=2.5$

所以最后的结果是height为80, depth为2.5