1	character unigram: c_i ,$-2 \leq i \leq 2$
2	character bigram: $c_{i-1}c_i$,$-1 \leq i \leq 2$; $c_{-1}c_1$ and c_0c_2
3	whether two characters are equal or not: $c_0 == c_{-2}$ and $c_0 == c_1$
4	character trigram: $c_{-1}c_0c_1$
5	character type unigram: $type(c_0)$
6	character types: $type(c_{-1})type(c_0)type(c_1)$
7	character types: $type(c_{-2})type(c_{-1})type(c_0)type(c_1)type(c_2)$