

In a language, each sentence is a string starting with a capital letter followed by two or more small letters and ending with three or more digits. Example sentences are Abc001, Zyxw9876 etc.

a) Write a BNF grammar for the language

$\langle s' \rangle \rightarrow \langle c' \rangle \langle a'' \rangle \langle d' \rangle$
 $\langle c' \rangle \rightarrow A|B|C|D|E|F \text{ } \text{---} \text{---} \text{---} \text{---} \text{---} \text{---} X|Y|Z$
 $\langle A' \rangle \rightarrow \langle B' \rangle \langle B' \rangle \langle H' \rangle$
 $\langle H' \rangle \rightarrow \langle B' \rangle \langle H' \rangle | E$
 $\langle B' \rangle \rightarrow a|b|c|d|e|f|g \text{ } \text{-----} x|y|z$
 $\langle D' \rangle \rightarrow \langle E' \rangle \langle E' \rangle \langle E' \rangle \langle F' \rangle$
 $\langle F' \rangle \rightarrow \langle E' \rangle \langle F' \rangle | E$
 $\langle E' \rangle \rightarrow |1|2|3|4|5|6|7|8|9$

Terminal = {A, B ---- x,y,x,a,b,c ---- x,y,z, 0,1,2 -----9}

Variables= { S',C',A',H',B',D',E'F'}