

PREDICTIVE PARSING

Aim: A program for Predictive Parsing

Algorithm:-

1. Start the program.
 2. Initialize the required variables.
 3. Get the number of coordinates and productions from the user.
 4. Perform the following
for (each production $A \rightarrow \alpha$ in G) {
for (each terminal a in $FIRST(\alpha)$)
add $A \rightarrow \alpha$ to $M[A, a]$;
if (ϵ is in $FIRST(\alpha)$)
for (each symbol b in $FOLLOW(A)$)
add $A \rightarrow \alpha$ to $M[A, b]$;
}
 5. Print the resulting stack.
 6. Print if the grammar is accepted or not.
 7. Exit the program.
-

OUTPUT

enter the no. of productions

2

enter the productions in a grammar

$S \rightarrow CC$

$C \rightarrow eC \mid d$

first pos

$FIRST[S] = e$

$FIRST[C] = e$

follow pos

$FOLLOW[S] = \$$

$FOLLOW[C] = d\$$

$M[S, e] = S \rightarrow CC$

$M[S, d] = S \rightarrow CC$

$M[C, d] = C \rightarrow eC$

$M[C, \$] = C \rightarrow eC$

$M[C, d] = C \rightarrow d$