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Class-TE-COM .B

Roll NO.-64

ASSIGNMENT NO.3

CODE FOR LEX:

```
%{
#include "y.tab.h"
%}


%%
[0-9]+      { return NUMBER; }
[a-zA-Z]     { return ID; }
[+\-*/()]    { return yytext[0]; }
[ \t\n]      ;
.           { return yytext[0]; }
%%


int yywrap() { return 1; }
```

CODE FOR YACC:

```
%{
#include <stdio.h>
#include <stdlib.h>
int yylex();
void yyerror(const char *s);
%}

%token NUMBER ID

%%
E : E '+' T
  | E '-' T
  | T
  ;


T : T '*' F
  | T '/' F
  | F
  ;


F : '(' E ')'
  | NUMBER
  | ID
  ;
%%
```

```c
int main() {

    printf("Enter an infix expression: ");

    if (yyparse() == 0)

        printf("\n Valid Infix Expression\n");

    else

        printf("\n Invalid Expression\n");

    return 0;

}


void yyerror(const char *s) {

    fprintf(stderr, "Error: %s\n", s);

}
```

OUTPUT:

Enter an infix expression: (a+b)*3-c

✅ Valid Infix Expression