MINI CALCULATOR

Compilation Project

PRESENTED TO
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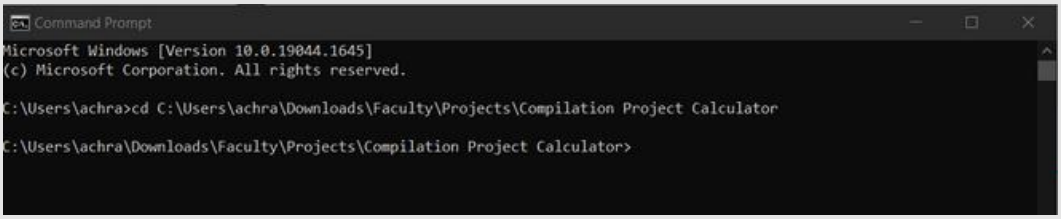
BISON FILE

```
%{
    #include<stdio.h>
    #define YYSTYPE int
    int yyparse();
    int yylex();
    yyerror(char *s);
%}
%token NOMBRE
%left PLUS
%left MINUS
%left MULT
%left DIV
%start RES
%%
RES: EXP {printf("Calcul: %d\n",$1);}
     EXP: NOMBRE |Add|Sous|Prod|Div {$$=$1;}
     Add: EXP PLUS EXP {printf("c'est une addition\n");$$ = $1 + $3;}
     Sous: EXP MINUS EXP {printf("c'est une soustraction\n");$$ = $1 - $3;}
     Prod: EXP MULT EXP {printf("c'est une production\n");$$ = $1 * $3;}
     Div: EXP DIV EXP {printf("c'est une division\n");$$ = $1 / $3;}
%%
void yyerror(char *s)
{
printf ("Erreur %s",s);
return 0;
}
int main(void)
{
yyparse();
return 0;
}
```

FLEX FILE

```
%{
    #include<stdio.h>
%}
%option noyywrap
others [ \t\n]+
number [0-9]+
plus \+
minus \-
prod \*
div \/
%%
{others}    {}
{number}    {yylval = atoi(yytext); return(NOMBRE); }
{plus}      {return(PLUS); }
{minus}     {return(MINUS); }
{prod}      {return(MULT); }
{div}       {return(DIV); }
%%
void main(){
yylex() ;
}
```

Change Directory



Compile Bison File

```
C:\Users\achra\Downloads\Faculty\Projects\Compilation Project Calculator>bison -d calcul.y
```

Compile Flex File

```
C:\Users\achra\Downloads\Faculty\Projects\Compilation Project Calculator>flex -ocalcul.c calcul.l
```

Execution