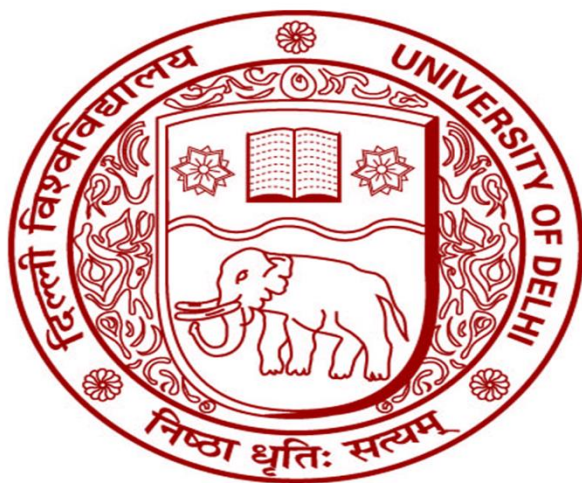


# RAMANUJAN COLLEGE DELHI UNIVERSITY



## SYSTEM PROGRAMMING PRACTICALS

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# INDEX

SNO.	PRACTICALS
1.	1. Write a Lex program to count the number of lines and characters in the input file
2.	2. Write a Lex program that implements the Caesar cipher: it replaces every letter with the one three letters after in in alphabetical order, wrapping around at Z. e.g., a is replaced by d, b by e, and so on z by c.
3.	3. Write a Lex program that finds the longest word (defined as a contiguous string of upper- and lower-case letters) in the input.
4.	4. Write a Lex program that distinguishes keywords, integers, floats, identifiers, operators, and comments in any simple programming language.
5.	5. Write a Lex program to count the number of identifiers in a C file.
6.	6. Write a Lex program to count the number of words, characters, blank spaces and lines in a C file.
7.	7. Write a Lex specification program that generates a C program which takes a string "abcd" and prints the following output. abcd abc ab a
8.	8. A program in Lex to recognize a valid arithmetic expression.
9.	9. Write a YACC program to find the validity of a given expression (for operators + - * and /)
10.	10. A Program in YACC which recognizes a valid variable which starts with letter followed by a digit. The letter should be in lowercase only.
11.	11. A Program in YACC to evaluate an expression (simple calculator program for addition and subtraction, multiplication, division).
12.	12. Program in YACC to recognize the strings "ab", "aabb", "aaabbb" ... of the language ( $a^n b^n, n \geq 1$ ).
13.	13. Program in YACC to recognize the language ( $a^n b, n \geq 10$ ). (Output to say input is valid or not)

## ANS 1.

```
%{  
  
    #include<stdio.h>  
    int lc=0, sc=0, tc=0, ch=0; /*Global variables*/  
    %}  
  
    /*Rule Section*/  
    %%  
    \n lc++; //line counter  
    ([ ])+ sc++; //space counter  
    \t tc++; //tab counter  
    . ch++; //characters counter  
    %%  
  
    int main()  
    {  
        // The function that starts the analysis  
        yyin=fopen("abc.txt","r");  
        yylex();  
  
        printf("\nNo. of lines=%d", lc);  
        printf("\nNo. of spaces=%d", sc);  
  
        printf("\nNo. of other characters=%d", ch);  
  
    }
```

## OUTPUT:

```
ramanujan@ramanujan-HLBS-CM-44: ~/Desktop/practical_1
ramanujan@ramanujan-HLBS-CM-44:~$ cd Desktop
ramanujan@ramanujan-HLBS-CM-44:~/Desktop$ cd practical_1/
ramanujan@ramanujan-HLBS-CM-44:~/Desktop/practical_1$ lex pract.l
ramanujan@ramanujan-HLBS-CM-44:~/Desktop/practical_1$ gcc lex.yy.c -lfl
ramanujan@ramanujan-HLBS-CM-44:~/Desktop/practical_1$ ./a.out

No. of lines=2
No. of spaces=8
No. of other characters=38ramanujan@ramanujan-HLBS-CM-44:~/Desktop/practical_1$
```

## ANS 2.

```
%{

%}
%%
[A-Za-w] {printf("%c",yytext[0]+3);}
[X-Zx-z] {printf("%c",yytext[0]-23);}
%%
int main()
{
//yyin=fopen("bbc.txt","r");
//yyout=fopen("kbc.txt","w");
yylex();

}
```

## OUTPUT:

```
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_2$ lex pract2.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_2$ gcc lex.yy.c -lfl
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_2$ ./a.out
kkdkww
nngnzz
hsshshshscececevever
kvvkvkvkvfhfhfhyhyhu
█
```

### ANS 3.

```
%{
    #include<stdio.h>
    #include<strings.h>
    // initialising length
    int length=0;
    // char array for storing longest word
    char longestword[50];
}%

%%
[A-Za-z0-9]+ { if (yyleng > length) {

                length=yyleng;
                // strcpy function to copy current word in yytxt in longest
                strcpy(longestword,yytext);
            }
}
```

```

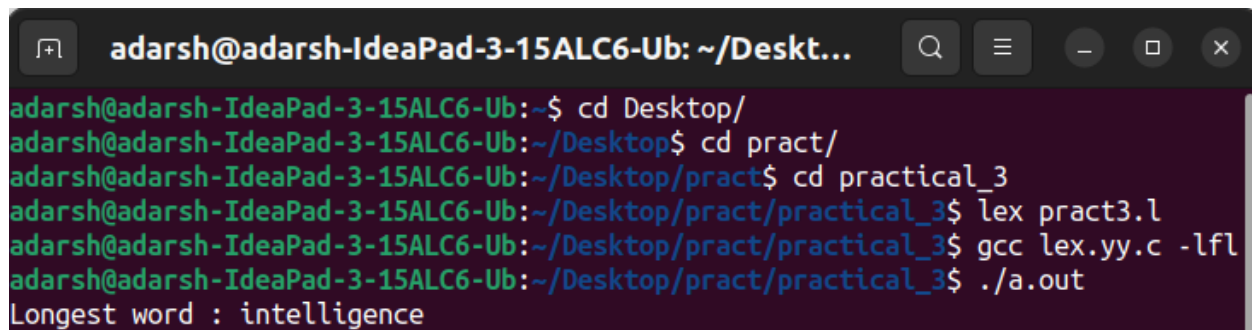
    }
    "." return 1;
    %%
    int main()
    {
        yyin=fopen("tbc.txt","r");

        yylex();
        printf("Longest word : %s\n",longestword);
        //printf("Length of Longest word : %s\n",length);

        return 0;
    }
    int yywrap(){
        return 1;
    }

```

## OUTPUT:



```

adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Deskt...
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~$ cd Desktop/
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop$ cd pract/
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract$ cd practical_3
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_3$ lex pract3.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_3$ gcc lex.yy.c -lfl
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_3$ ./a.out
Longest word : intelligence

```

ANS 4.

%{

%}

%%

[0-9]\* {printf("Integer\n");}

[0-9]+\.[0-9]+ {printf("Float\n"); }

int|float|if|else|printf|main|exit|switch {printf("Keyword\n");}

[+|\*|/|%|&] {printf("Operators\n");}

"- " {printf("Operators\n");}

"/\*".\*\*"/" {printf("comment\n");}

[\_a-zA-Z][\_a-zA-Z0-9]{0,30} {printf("Identifier\n");}

. {printf("Invalid\n");}

%%

int main()

{

yyin=fopen("code.c","r");

yyout=fopen("kmd.txt","w");

yylex();

}

**OUTPUT:**

[illegible]

**ANS 5.**

 $\% \{$

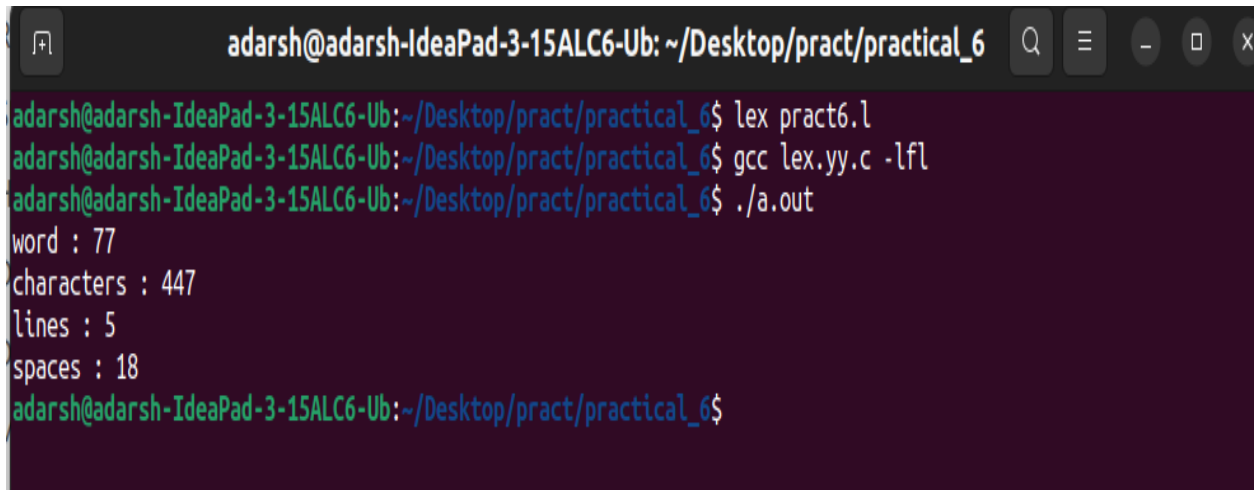


```

#include<stdio.h>
int word=0,character=0,space=0,lines=0;
%}
%%
[A-Za-z|0-9]+ {word++;character=character+strlen(yytext);}
. {character++;}
\n {lines++;character++;}
[ \n\t\r]+ {space++;}
%%
int main(int argc,char **argv)
{
yyin=fopen("pla.txt","r");
yylex();
printf("word : %d\n",word);
printf("characters : %d\n",character);
printf("lines : %d\n",lines);
printf("spaces : %d\n",space);
}

```

## OUTPUT:



```

adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_6
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ lex pract6.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ gcc lex.yy.c -lfl
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ ./a.out
word : 77
characters : 447
lines : 5
spaces : 18
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$

```

## ANS 6.

```
%{
```

```

#include<stdio.h>
int word=0,character=0,space=0,lines=0;
%}
%%
[A-Za-z|0-9]+ {word++;character=character+strlen(yytext);}
. {character++;}
\n {lines++;character++;}
[ \n\t\r]+ {space++;}
%%
int main(int argc,char **argv)
{
yyin=fopen("pla.txt","r");
yylex();
printf("word : %d\n",word);
printf("characters : %d\n",character);
printf("lines : %d\n",lines);
printf("spaces : %d\n",space);
}

```

## OUTPUT:



```

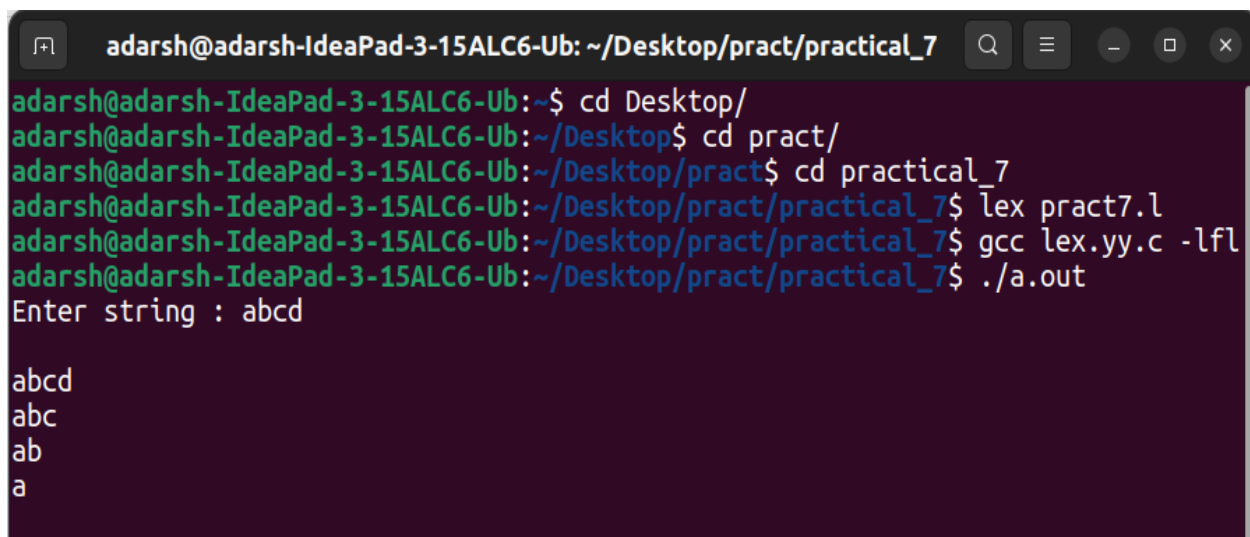
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_6
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ lex pract6.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ gcc lex.yy.c -lfl
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$ ./a.out
word : 77
characters : 447
lines : 5
spaces : 18
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_6$

```

## ANS 7.

```
%{  
    %}  
    %%  
    [A-Za-z]+ {int len=yyleng;  
                int i=len;  
                printf("\n");  
                while(i>=0)  
                {  
                    int j=0;  
                    while(j<i)  
                    {  
                        printf("%c",yytext[j]);  
                        j++;  
                    }  
                    printf("\n");  
                    i--;  
                }  
            }  
    %%  
    int main()  
    {  
        printf("Enter string : ");  
        yylex();  
    }
```

## OUTPUT:

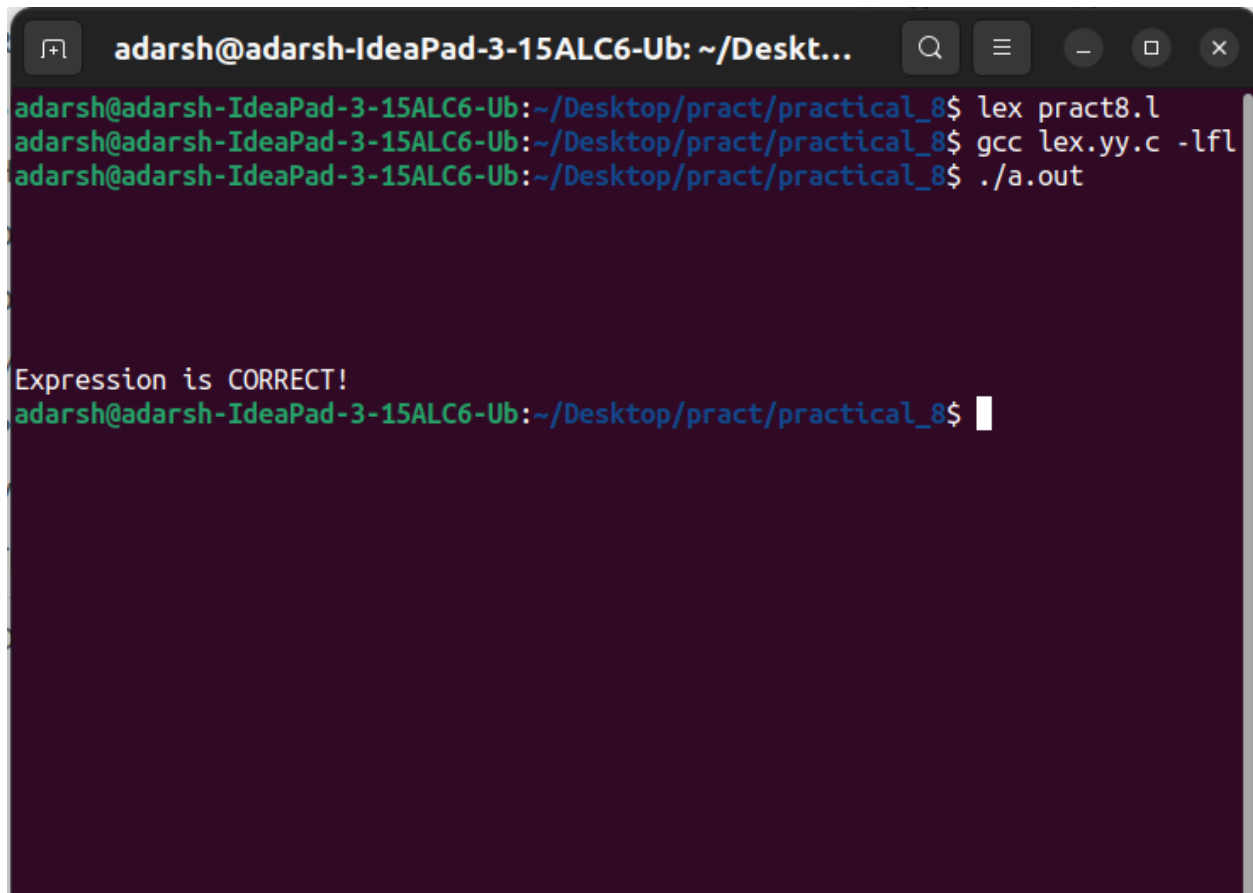


```
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_7  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop$ cd Desktop/  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop$ cd pract/  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract$ cd practical_7  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_7$ lex pract7.l  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_7$ gcc lex.yy.c -lfl  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_7$ ./a.out  
Enter string : abcd  
  
abcd  
abc  
ab  
a
```

## ANS 8.

```
%{  
    #include<strings.h>  
    int opcount=0,intcount=0,check=1,top=0;  
    %}  
    %%  
    ['('] {check=0;}  
    [')'] {check=1;}  
    [ + | * | / | - ] {opcount++;}  
    [ 0 - 9 ] + {intcount++;}  
    . {printf("Invalid Input only digits and +|-|*|/ is valid\n");}  
    %%  
    int main()  
    {  
  
        yyin=fopen("abd.txt","r");  
        yylex();  
        if(intcount==opcount+1)  
        {  
            if(check==1)  
            {  
                printf("Expression is CORRECT!\n");  
            }  
            else{  
                printf("'')' bracket missing from expression\n");  
            }  
        }  
        else{  
            printf("Expression is INCORRECT!\n");  
        }  
    }  
}
```

## OUTPUT:

A terminal window with a dark background and light-colored text. The window title is "adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Deskt...". The terminal shows three lines of commands: "lex pract8.l", "gcc lex.yy.c -lfl", and "./a.out". The output of the program is "Expression is CORRECT!". The prompt "adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical\_8\$" is visible at the bottom.

```
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Deskt...  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_8$ lex pract8.l  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_8$ gcc lex.yy.c -lfl  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_8$ ./a.out  
  
Expression is CORRECT!  
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_8$
```

## ANS 9.

### Lex program:

```
%{
    #include<stdio.h>
    #include "y.tab.h"
}%

%%
[a-zA-Z]+ return VARIABLE;
[0-9]+ return NUMBER;
[\\t] ;
[\\n] return 0;
. return yytext[0];
%%
int yywrap()
{
    return 1;
}
```

## Yacc program:

```
%{  
    #include<stdio.h>  
}%  
%token NUMBER  
%token VARIABLE  
  
%left '+' '-'  
%left '*' '/' '%'  
%left '(' ')'  
  
%%  
  
S: VARIABLE='E' {  
    printf("\nEntered arithmetic expression is Valid\n\n");  
    return 0;  
}  
E: E '+' E  
  | E '-' E  
  | E '*' E  
  | E '/' E  
  | E '%' E  
  | '(' E ')'  
  | NUMBER  
  | VARIABLE  
;  
  
%%  
  
void main()  
{  
    printf("\nEnter Any Arithmetic Expression which can have operations Addition,  
Subtraction, Multiplication, Divison, Modulus and Round brackets:\n");  
    yyparse();  
}
```

```

}

void yyerror()
{
    printf("\nEntered arithmetic expression is Invalid\n\n");
}

```

## OUTPUT:

```

adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$ yacc -d pract9.y
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$ lex pract9.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$ cc lex.yy.c y.tab.c -ll
y.tab.c: In function 'yyparse':
y.tab.c:1034:16: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
1034 |     yychar = yylex ();
      |                  ^~~~~
y.tab.c:1178:7: warning: implicit declaration of function 'yyerror'; did you mean 'yyerrok'? [-Wimplicit-function-declaration]
1178 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
      |     yyerrok
pract9.y: At top level:
pract9.y:35:6: warning: conflicting types for 'yyerror'; have 'void()'
35 | void yyerror()
   |      ^~~~~~
y.tab.c:1178:7: note: previous implicit declaration of 'yyerror' with type 'void()'
1178 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$ ./a.out

Enter Any Arithmetic Expression which can have operations Addition, Subtraction, Multiplication, Divison, Modulus and Round brack
a=56-9

Entered arithmetic expression is Valid

adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$ ./a.out

Enter Any Arithmetic Expression which can have operations Addition, Subtraction, Multiplication, Divison, Modulus and Round brack
aaaa4s

Entered arithmetic expression is Invalid

adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_9$

```



## ANS 10.

### Lex program:

```
%{
    #include "y.tab.h"
    %}
    %%
    [0-9]+ {return DIGIT;}
    [a-z]+ {return LETTER;}
    [ \t] {;}
    \n { return 0;}
    . {return yytext[0];}
    %%
```

### Yacc program:

```
%{
    #include<stdio.h>
    #include<stdlib.h>
    %}
    %token DIGIT LETTER
    %%
    stmt:A
        ;
    A: LETTER B
        ;
    B: LETTER B
        | DIGIT B
        | LETTER
        | DIGIT
        ;
    %%
    void main(){
    printf("enter string \n");
```

```
yyvsparse();  
printf("valid \n");  
exit(0);  
}  
void yyerror()  
{  
printf("invalid \n");  
exit(0);  
}
```

**OUTPUT:**

```

adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ yacc -d pract10.y
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ lex pract10.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ cc lex.yy.c y.tab.c -ll
y.tab.c: In function 'yyparse':
y.tab.c:1014:16: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
1014 |     yychar = yylex ();
      |                ^~~~~~
y.tab.c:1149:7: warning: implicit declaration of function 'yyerror'; did you mean 'yyerrok'? [-Wimplicit-function-declaration]
1149 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
      |     yyerrok
pract10.y: At top level:
pract10.y:23:6: warning: conflicting types for 'yyerror'; have 'void()'
23 | void yyerror()
   |     ^~~~~~
y.tab.c:1149:7: note: previous implicit declaration of 'yyerror' with type 'void()'
1149 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ ./a.out
enter string
a1
valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ ./a.out
enter string
54a
invalid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$ ./a.out
enter string
q9
valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_10$

```

**ANS 11.**

**Lex program:**

```

%{
    #include<stdio.h>
    #include "y.tab.h"
    extern int yylval;
    %}

%%
[0-9]+ {
    yylval=atoi(yytext);
    return NUMBER;
}
[\\t] ;
[\\n] return 0;
. return yytext[0];
%%
int yywrap()
{
    return 1;
}

```

## Yaac program:

```

%{
    #include<stdio.h>

```

```

        int flag=0;

    %}

    %token NUMBER

    %left '+' '-'
    %left '*' '/' '%'
    %left '(' ')'
    %%

    ArithmeticExpression: E{
        printf("\nResult=%d\n", $$);
        return 0;
    }

    E: E '+' E {$$=$1+$3;}
    | E '-' E {$$=$1-$3;}
    | E '*' E {$$=$1*$3;}
    | E '/' E {$$=$1/$3;}
    | E '%' E {$$=$1%$3;}
    | '(' E ')' {$$=$2;}
    | NUMBER {$$=$1;}

    ;
    %%

    void main()
    {
        printf("\nEnter Any Arithmetic Expression :\n");
        yyparse();
        if(flag==0)
            printf("\nEntered arithmetic expression is Valid\n\n");

    }

    void yyerror()
    {
        printf("\nEntered arithmetic expression is Invalid\n\n");
        flag=1;
    }

```

## OUTPUT:

```

adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ yacc -d pract11.y
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ lex pract11.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ cc lex.yy.c y.tab.c
y.tab.c: In function 'yyparse':
y.tab.c:1026:16: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
1026 |     yychar = yylex ();
      |              ^~~~~~
y.tab.c:1212:7: warning: implicit declaration of function 'yyerror'; did you mean 'yyerrok'? [-Wimplicit-function-declaration]
1212 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
      |     yyerrok
pract11.y: At top level:
pract11.y:34:6: warning: conflicting types for 'yyerror'; have 'void()'
34 | void yyerror()
   |     ^~~~~~
y.tab.c:1212:7: note: previous implicit declaration of 'yyerror' with type 'void()'
1212 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ ./a.out

Enter Any Arithmetic Expression :
4+6-9

Result=1

Entered arithmetic expression is Valid

adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ ./a.out

Enter Any Arithmetic Expression :
a+b

Entered arithmetic expression is Invalid

adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_11$ ./a.out

Enter Any Arithmetic Expression :
(45+6)-(21*2)

Result=9

Entered arithmetic expression is Valid

```

**ANS 12.**

## Lex program:

```
%{  
    #include "y.tab.h"  
    %}  
    alpha [Aa]  
    beta [Bb]  
    newline [\n]  
    %%  
    {alpha} { return alpha ;}  
    {beta} {return beta;}  
    {newline} { return newline ;}  
    . { printf("Invalid Expression\n");exit(0); }  
    %%
```

## Yaac program:

```
%{  
    #include<stdio.h>  
    #include<stdlib.h>  
    #include<strings.h>  
    %}  
    %token alpha beta newline  
    %%  
    line : term newline {printf("Input is Valid\n"); exit(0);};  
    term: alpha term beta | ;  
    %%  
  
    int yyerror(char *msg)  
    {  
        printf("Invalid Input\n");  
        exit(0);  
    }  
  
    int main ()  
    {  
        printf("Enter the expresssion: ");  
        yyparse();  
    }
```

## OUTPUT:

```
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ yacc -d pract11.y
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ lex pract11.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ cc lex.yy.c y.tab.c -ll
y.tab.c: In function 'yyparse':
y.tab.c:1018:16: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
1018 |     yychar = yylex ();
      |                ^~~~~~
y.tab.c:1159:7: warning: implicit declaration of function 'yyerror'; did you mean 'yyerrok'? [-Wimplicit-function-declaration]
1159 |     yyerror (YY_("syntax error"));
      |           ^~~~~~
      |           yyerrok
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ ./a.out
Enter the expression: ab
Input is Valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ aabb
aabb: command not found
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ ./a.out
Enter the expression: aabb
Input is Valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ ./a.out
Enter the expression: aaabbb
Input is Valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ ./a.out
Enter the expression: a
Invalid Input
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$ ./a.out
Enter the expression: iii
Invalid Expression
adarsh@adarsh-IdeaPad-3-15ALC6-Ub: ~/Desktop/pract/practical_11$
```



## ANS 13.

### Lex program:

```
%{
    #include "y.tab.h"
    %}
    alpha [a]{10,}
    beta [b]
    newline [\n]
    %%
    {alpha} { return alpha ;}
    {beta} {return beta;}
    {newline} { return newline ;}
    . { printf("Invalid Expression\n");exit(0); }
    %%
```

### Yaac program:

```
%{
    #include<stdio.h>
    #include<stdlib.h>
    #include<strings.h>
    %}
    %token alpha beta newline
    %%
    line : term beta newline {printf("Input is Valid\n"); exit(0);};
    term: alpha term |;
    %%

    int yyerror(char *msg)
    {
        printf("Invalid Input\n");
        exit(0);
    }

    int main ()
    {
        printf("Enter the expresssion: ");
        yyparse();
    }
```

## OUTPUT:

```
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ yacc -d pract13.y
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ lex pract13.l
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ cc lex.yy.c y.tab.c -ll
y.tab.c: In function 'yyparse':
y.tab.c:1018:16: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
1018 |     yychar = yylex ();
      |                ^~~~~
y.tab.c:1159:7: warning: implicit declaration of function 'yyerror'; did you mean 'yyerrok'? [-Wimplicit-function-declaration]
1159 |     yyerror (YY_("syntax error"));
      |     ^~~~~~
      |     yyerrok
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ ./a.out
Enter the expression: aab
Invalid Expression
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ aaaaaaaab
aaaaaaaab: command not found
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ ./a.out
Enter the expression: aaaaaaaab
Input is Valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ ./a.out
Enter the expression: aaaaaaaaaaaaaaaaaaaaaab
Input is Valid
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$ ./a.out
Enter the expression: vbv
Invalid Expression
adarsh@adarsh-IdeaPad-3-15ALC6-Ub:~/Desktop/pract/practical_13$
```

