```
%{

        #include <stdio.h>
        #include <stdlib.h>
        #include <string.h>
        char in_str[100];
        int line_no = 1;
        void quicksort(char *arr, int p, int r);
        int partition(char *arr, int p, int r);


%}

%%

[\n]    {

        line_no++;

}

[a-zA-Z]+       {

        char yy_str[100];
        int k;
        for(k=0; k<yyleng; k++)
        {
                yy_str[k] = yytext[k];
        }
        yy_str[yyleng] = '\0';

        if(yyleng == strlen(in_str))
        {
                char *yytext_str = yytext;
                quicksort(yytext_str, 0, yyleng-1);

                int count=0;
                int i;
                for(i=0; i<yyleng; i++)
                {
                        if(yytext_str[i]==in_str[i])
                        {
                                count++;
                        }
                        else
                                break;

                }
                if(count == yyleng)
                        fprintf(yyout, "ANAGRAM [ %s ] present at line number : %d.\n",yy_str,
line_no);
        }

}

.       {}

%%


void quicksort(char arr[], int p, int r)
{
        if(p<r)
        {
                int q = partition(arr, p, r);
                quicksort(arr, p, q-1);
                quicksort(arr, q+1, r);
        }
}

int partition(char arr[], int p, int r)
{
```

```
        int x = arr[r];
        int i = p-1;
        int j;
        for(j=p; j<r; j++)
        {
                if(arr[j]<=x)
                {
                        i = i+1;
                        char temp = arr[i];
                        arr[i] = arr[j];
                        arr[j] = temp;
                }
        }
        char temp = arr[i+1];
        arr[i+1] = arr[r];
        arr[r] = temp;
        return i+1;
}



int main()
{
        char in_file_name[100];
        printf("Enter the input file name : ");
        scanf("%123s",in_file_name);

        printf("Enter the string : ");
        scanf("%s",in_str);
        quicksort(in_str, 0, strlen(in_str)-1);

        extern FILE *yyin;
        extern FILE *yyout;

        yyin = fopen(in_file_name, "r");

        if(yyin == NULL)
                printf("\nError!!!\nCan't open the file.\n");

        yyout = fopen("output_file.cpp", "w");

        yylex();

        fclose(yyin);
        fclose(yyout);

        return 0;
}
```