

## **PRACTICAL:7**

**AIM:** Write a c code to generate assembly code from three address code .

**Code:**

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
struct three
{
char data[10],temp[7];
}s[30];
void main()
{
    char *d1,*d2;
    int i=0,len=0;
    FILE *f1,*f2;
    clrscr();
    f1=fopen("exe1.txt","r");
    f2=fopen("exe2.txt","w");
    while(fscanf(f1,"%s",s[len].data)!=EOF)
    len++;
    for(i=0;i<=len;i++)
    {
        if(!strcmp(s[i].data,"="))
        {
            fprintf(f2,"\nLDA\t%s",s[i+1].data);
            if(!strcmp(s[i+2].data,"+"))
            fprintf(f2,"\nADD\t%s",s[i+3].data);
            if(!strcmp(s[i+2].data,"-"))
            fprintf(f2,"\nSUB\t%s",s[i+3].data);
            fprintf(f2,"\nSTA\t%s",s[i-1].data);
        }
    }
    fclose(f1);
    fclose(f2);
    getch();
}
```

## Output:

```
LDA in1
ADD in2
STA t1
LDA t1
ADD in3
STA t2
LDA t2
SUB in4
STA t3
LDA t3
STA out
```