Experiment -18

Write a C program to implement the back end of the compiler.

Program:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main()
{
        int n,i,j;
        char a[50][50];
        printf("enter the no: intermediate code:");
        scanf("%d",&n);
        for(i=0;i<n;i++)
        {
                printf("enter the 3 address code:%d:",i+1);
                for(j=0;j<6;j++)
                {
                        scanf("%c",&a[i][j]);
                }
        }
        printf("the generated code is:");
        for(i=0;i<n;i++)
        {
                printf("\n mov %c,R%d",a[i][3],i);
                if(a[i][4]=='-')
                {
                        printf("\n sub %c,R%d",a[i][5],i);
                }
                if(a[i][4]=='+')
                {
```

```
                printf("\n add %c,R%d",a[i][5],i);
            }
            if(a[i][4]=='*')
            {
                printf("\n mul %c,R%d",a[i][5],i);
            }
            if(a[i][4]=='/')
            {
                printf("\n div %c,R%d",a[i][5],i);
            }
            printf("\n mov R%d,%c",i,a[i][1]);
            printf("\n");
        }
        return 0;
}
```

Output: