

Program

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include<ctype.h>
int isKeyword(char buffer[]){
char keywords[32][10]={ "auto","break","case","char","const","continue","default",
                        "do","double","else","enum","extern","float","for","goto",
                        "if","int","long","register","return","short","signed","sizeof",
                        "static","struct","switch","typedef","union","unsigned","void",
                        "volatile","while"};

int i,flag=0;
for(i=0;i<32;i++)
{
    if(strcmp(keywords[i],buffer)==0)
    {
        flag=1;
        break;
    }
}
return flag;
}
int main()
{
    char ch,buffer[15],operators[]="+-*/%=";
    FILE *fp;
    int i,j=0;
    fp=fopen("program.txt","r");
    if(fp==NULL)
    {
        printf("Error while opening file");
        exit(0);
    }
    while((ch=fgetc(fp))!=EOF)
    {
        for(i=0;i<6;i++)
        {
            if(ch==operators[i])
                printf("\n%c is a operator",ch);
        }
        if(isalnum(ch))
        {
            buffer[j++]=ch;
        }
        else if((ch==' '||ch=='\n')&&(j!=0))
        {
            buffer[j]='\0';
            j=0;
            if(isKeyword(buffer)==1)
                printf("%s is keyword \n",buffer);
        }
    }
}
```

```
        else
        printf("%s is Identifier \n",buffer);
    }
}

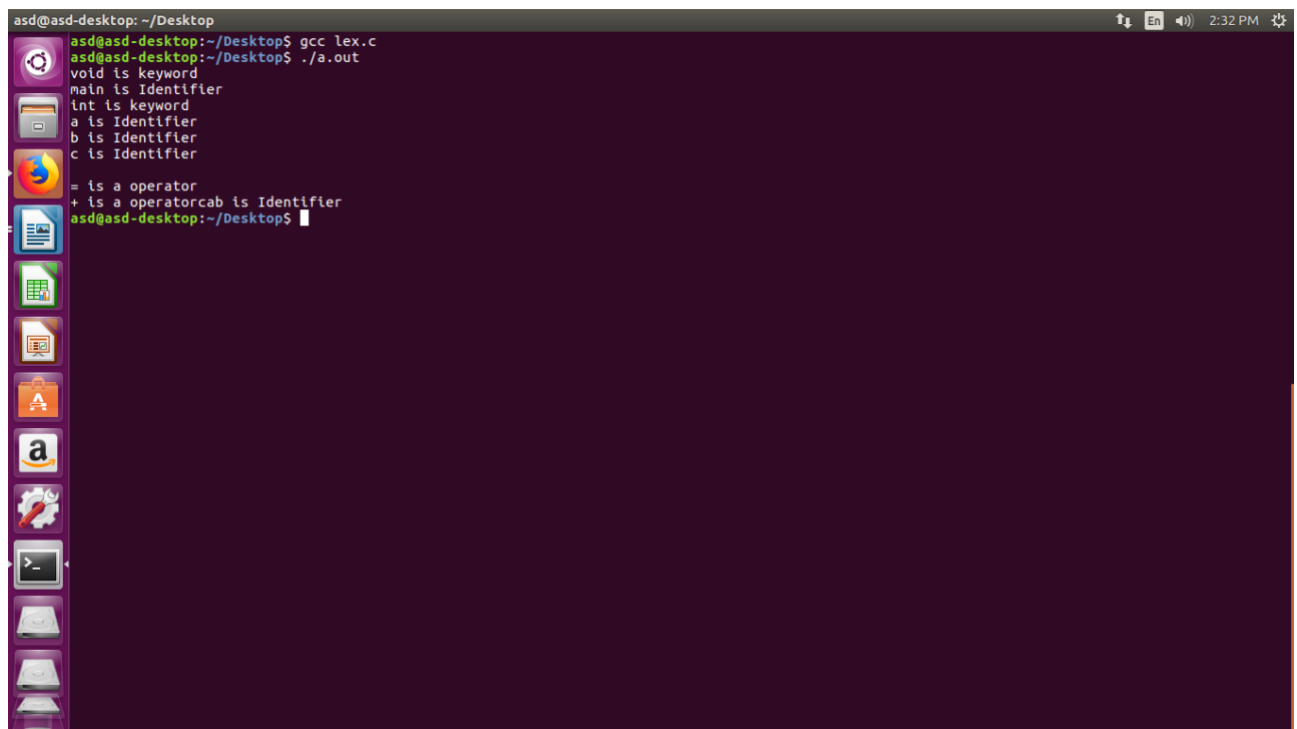
fclose(fp);
return 0;
}
```

Input

program.txt

```
void main()
{
int a ,b ,c ;
c=a+b;
}
```

Output



```
asd@asd-desktop: ~/Desktop
asd@asd-desktop:~/Desktop$ gcc lex.c
asd@asd-desktop:~/Desktop$ ./a.out
void is keyword
main is Identifier
int is keyword
a is Identifier
b is Identifier
c is Identifier

= is a operator
+ is a operatorcab is Identifier
asd@asd-desktop:~/Desktop$
```