

```
#include<stdio.h>
#include<regex.h>
#include<string.h>
void main()
{
    regex_t regex;
```

```

char s[100];
FILE *fp = fopen("regex.c","r");
char *token,*tk;
while(!feof(fp))
{
fgets(s,50,fp);
if(regcomp(&regex,"#include",0)==0&&regexec(&regex,s,0,NULL,0)==0){
printf("Header : %s\n",s);
}
else if(regcomp(&regex,"#define",0)==0&&regexec(&regex,s,0,NULL,0)==0){
printf("Macro: %s\n",s);
}
else if((regcomp(&regex,"^int",0)==0&&regexec(&regex,s,0,NULL,0)==0)
|| (regcomp(&regex,"^float",0)==0&&regexec(&regex,s,0,NULL,0)==0) || (regcomp(&regex,"^voi
d",0)==0&&regexec(&regex,s,0,NULL,0)==0) || (regcomp(&regex,"^char",0)==0&&regexec(&reg
ex,s,0,NULL,0)==0))
{
token = strtok(s," ");
printf("Keyword : %s\n",token);
token = strtok(NULL," ");
token = strtok(token,";\n");
while(token!=NULL)
{
printf("Identifier : %s\n",token);
token = strtok(NULL,";\n");
}
}
}

```

```
else if((regcomp(&regex,"printf",0)==0&&regexexec(&regex,s,0,NULL,0)==0)
| |(regcomp(&regex,"scanf",0)==0&&regexexec(&regex,s,0,NULL,0)==0))
{
tk = strtok(s,"(");
printf("\nInbuilt Function : %s",tk);
}
```

```
else if(regcomp(&regex,"*",0)==0&&regexexec(&regex,s,0,NULL,0)==0)
printf("\nOperator : *");
}
fclose(fp);
}
```