

```

1  #include <stdio.h>
2  #include <ctype.h>
3  #include <string.h>
4
5  int main()
6  {
7      char id[50]; int i,ok=1;
8      scanf("%s",id);
9      if(!isalpha(id[0]) && id[0]!='_') ok=0;
10     for(i=1;id[i];i++) if(!isalnum(id[i]) && id[i]!='_') ok=0;
11     printf(ok?"Valid Identifier\n":"Invalid Identifier\n");

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled7.exe
- Output Size: 128.9453125 KiB
- Compilation Time: 0.20s

abc_123





Valid Identifier

Process exited after 14.5 seconds with return value 0
 Press any key to continue . . . |

```

1  #include <stdio.h>
2  #include <string.h>
3
4  int main()
5  {
6      char c;
7      while((c=getchar())!=EOF)
8          if(c=='+'||c=='-'||c=='*'||c=='/')
9              printf("Operator: %c\n",c);
10     }
11     return 0;

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

- Errors: 0

- Warnings: 0

- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled4.exe

- Output Size: 1284.038.8405 KiB

- Compilation Time: 0.00s

```

a+b-c*5/2;
Operator: +
Operator: -
Operator: *
Operator: /

```

```

1  #include <stdio.h>
2  #include <ctype.h>
3  #include <string.h>
4
5  #define L 51
6  int main()
7  {
8      char c,s[L],n[20],op[]="+-*/%<>!="; int i;
9      while((c=getchar())!=EOF){
10         if(isspace(c)) continue;
11         if(c=='/'){
12             if((c=getchar())=='/') while((c=getchar())!='\n'&&c!=EOF);
13             else if(c=='*') while((c=getchar())!=EOF) if((c=='/'&&(c=getchar())=='/') break;
14             else {ungetc(c,stdin); printf("Op: /\n");}
15             continue;
16         }
17         if(isalpha(c)||c=='_'){
18             for(i=0;i<L-1&&(isalnum(c)||c=='_'),c=getchar()) s[i++]=c;
19             s[i]='\0'; printf("Id: %s\n",s); ungetc(c,stdin);
20         }
21         else if(isdigit(c)){
22             for(i=0;isdigit(c);c=getchar()) n[i++]=c;
23             n[i]='\0'; printf("Const: %s\n",n); ungetc(c,stdin);
24         }
25         else if(strchr(op,c)) printf("Op: %c\n",c);
26     }
}

```

 Compile Log
  Debug
  Find Results
  Close

compilation results...

```

Errors: 0
Warnings: 0
Output Filename: C:\Users\areel\OneDrive\Desktop\Untitled1.exe
Output Size: 137,128,512,000 KiB
Compilation Time: 1.33s

```

```

int a = 10;
Id: int
Id: a
Op: =
Const: 10
a = a + 5;
Id: a
Op: =
Id: a
Op: +
Const: 5

```

```

1  #include <stdio.h>
2  #include <string.h>
3
4  int main(){
5      char line[100];
6      while(fgets(line,100,stdin)){
7          if(strncmp(line,"//",1)==0) printf("Single-line comment\n");
8          else if(strncmp(line,"/*",2)==0 && strstr(line,"*/")) printf("Multi-line comment\n");
9          else printf("Not a comment\n");
10     }
11     return 0;
12 }
13

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

= Errors: 0

= Warnings: 0

= Output Filename: C:\Users\Breezy\OneDrive\Desktop\Untitled3.exe

= Output Size: 128,207,8079.125 KiB

= Compilation Time: 0.14s

```

int a = 5;
Not a comment
a = a+1;
Not a comment
|

```

```

1  #include <stdio.h>
2  #include <string.h>
3
4  struct sym{char n[20],t[10];} tab[50]; int c=0;
5
6  void ins(char *n,char *t){ strcpy(tab[c].n,n); strcpy(tab[c++].t,t); }
7  int sea(char *n){ for(int i=0;i<c;i++) if(!strcmp(tab[i].n,n)) return i; return -1; }
8  void disp(){ for(int i=0;i<c;i++) printf("%s\t%s\n",tab[i].n,tab[i].t); }
9
10 int main(){
11     int ch; char n[20],t[10];
12     while(1){
13         scanf("%d",&ch);
14         if(ch==1){ scanf("%s %s",n,t); ins(n,t); }
15         else if(ch==2){ scanf("%s",n); int i=sea(n); printf(i!=-1?"Found\n":"Not Found\n"); }
16         else if(ch==3) disp();
17         else break;
18     }
19 }

```

Compile Log
 Debug
 Find Results
 Close

Compilation results...

```

-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled10.exe
- Output Size: 130.0419921075 KiB
- Compilation Time: 0.17s

```

```

1 a int
2 b float
Not Found
Not Found
3
a      int
4 b

```

```

-----
Process exited after 25.94 seconds with return value 0
Press any key to continue . . . |

```

```

1  #include <stdio.h>
2  #include <string.h>
3
4  int check(char *s){
5      int i=0,j=strlen(s)-1;
6      while(i<j) if(s[i++]!='a' || s[j--]!='b') return 0;
7      return (i>j);
8  }
9
10 int main(){
11     char s[50];
12     scanf("%s",s);
13     printf(check(s)? "Valid\n": "Invalid\n");
14 }

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled11.exe
- Output Size: 109.6099999105 KiB
- Compilation Time: 0.16s

```

aabb
Valid

```

```

Process exited after 3.786 seconds with return value 0
Press any key to continue . . . |

```

```

1  #include <stdio.h>
2  #include <ctype.h>
3  #include <math.h>
4
5  char *p;
6
7  int E(); int T(); int F(); int P();
8
9  int E(){ int v=T(); while(*p=='+'||*p=='-'){ char op=*p++; int n=T(); v=(op=='+')?v+n:v-n; } return v; }
10 int T(){ int v=F(); while(*p=='*'||*p=='/'){ char op=*p++; int n=F(); v=(op=='*')?v*n:v/n; } return v; }
11 int F(){ int v=P(); if(*p=='^'){ p++; v=pow(v,F()); } return v; }
12 int P(){ int v=0; if(*p=='('){ p++; v=E(); if(*p==')') p++; } else while(isdigit(*p)) v=v*10+(*p++-'0'); return v; }
13
14 int main(){
15     char s[100]; printf("Enter expression: ");
16     scanf("%s",s); p=s;
17     printf("Result=%d\n",E());
18 }

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

```

-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sree1\OneDrive\Desktop\Untitled13.exe
- Output Size: 151.8173888108 KiB
- Compilation Time: 0.16s

```

Enter expression: 2+3*4

Result=14




Process exited after 14.76 seconds with return value 0

Press any key to continue . . . |


```

1  #include <stdio.h>
2  #include <string.h>
3  char str[50]; int i=0;
4
5  void E(); void E_(); void T(); void T_(); void F();
6
7  void E(){ T(); E_(); }
8  void E_(){ if(str[i]==''){ i++; T(); E_(); } }
9  void T(){ F(); T_(); }
10 void T_(){ if(str[i]=='*'){ i++; F(); T_(); } }
11 void F(){
12     if(str[i]=='('){ i++; E(); if(str[i]==')') i++; else {printf("Error\n"); return; } }
13     else if(str[i]=='i'&&str[i+1]=='d'){ i+=2; }
14     else { printf("Error\n"); return; }
15 }
16
17 int main()
18 {
19     printf("Enter expression: ");
20     scanf("%s",str);
21     E();
22     if(str[i]=='\0') printf("Parsing Successful\n");
23     else printf("Error\n");

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

- Errors: 0
 - Warnings: 0
 - Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled12.exe
 - Output Size: 129.3935846875 KiB
 - Compilation Time: 0.17s

Enter expression: id+id*id
 Parsing Successful

 Process exited after 16.13 seconds with return value 0
 Press any key to continue . . . |


```

1  #include <stdio.h>
2  #include <ctype.h>
3  #include <math.h>
4
5  char *p;
6
7  int E(); int T(); int F(); int P();
8
9  int E(){ int v=T(); while(*p=='+'||*p=='-'){ char op=*p++; int n=T(); v=(op=='+'?v+n:v-n; } return v; }
10 int T(){ int v=F(); while(*p=='*'||*p=='/'){ char op=*p++; int n=F(); v=(op=='*'?v*n:v/n; } return v; }
11 int F(){ int v=P(); if(*p=='^'){ p++; v=pow(v,F()); } return v; }
12 int P(){ int v=0; if(*p=='('){ p++; v=E(); if(*p==')') p++; } else while(isdigit(*p)) v=v*10+(*p++-'0'); return v; }
13
14 int main()
15 { char s[100]; printf("Enter expression: ");
16   scanf("%s",s); p=s;
17   printf("Result=%d\n",E());
18 }

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

```

-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sree1\OneDrive\Desktop\Untitled13.exe
- Output Size: 181.617380000000 B
- Compilation Time: 0.16s

```

Enter expression: a+b*c
 Result=0

 Process exited after 10.8 seconds with return value 0
 Press any key to continue . . . |

```

1  #include <stdio.h>
2  #include <string.h>
3
4  int main()
5  {
6      char nt, p1[20], p2[20];
7      printf("Enter production (E->ab|ac): ");
8      scanf("%c->%[^|]|%s",&nt,p1,p2);
9      int i=0;
10     while(p1[i] && p2[i] && p1[i]==p2[i]) i++; // find common prefix
11     if(i==0) printf("No Left Factoring\n");
12     else {
13         printf("%c->",nt);
14         for(int j=0;j<i;j++) printf("%c",p1[j]);
15         printf("%c'\n%c'->%s|s\n",nt,p1+i,p2+i);
16     }
17 }

```

 Compile Log
  Debug
  Find Results
  Close

Compilation results...

- Errors: 0
 - Warnings: 0
 - Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled9.exe
 - Output Size: 109.4403606105 KiB
 - Compilation Time: 0.16s

Enter production (E->ab|ac): E->ab|ac;

E->a

Process exited after 24.88 seconds with return value 3221225477
 Press any key to continue . . . |