public class Compiler {  
  
 private String[] keyWords= new String[]{"void","main","int","char","if","else","for","while"};  
  
 *//设定语言的关键字* public void setKeyWords(String[] keyWords) {  
 this.keyWords = keyWords;  
 }  
  
 *//方法将输入输入的字符串转换为字符数组* public String[] strToArr(String input){  
 String[] stringArray = input.split("[ \n]+");  
 return stringArray;  
 }  
  
 *//输入是字符串数组* public void analysis(String[] strArr){  
  
 int result;  
  
 for (int index = 0; index < strArr.length; index++) {  
  
 *//字符串数组第一个符号是+* if(strArr[index].charAt(0) == '+'){  
 if(strArr[index].equals("++")){  
 System.*out*.println("(++,212)");  
 }else{  
 System.*out*.println("(+,201)");  
 }  
 } else if (strArr[index].charAt(0) == '-') {  
 if(strArr[index].equals("--")){  
 System.*out*.println("(--,213)");  
 }else{  
 System.*out*.println("(-,202)");  
 }  
 } else if (strArr[index].charAt(0) == '\*') {  
 System.*out*.println("(\*,203)");  
   
 } else if (strArr[index].charAt(0) == '/') {  
 System.*out*.println("(/,204)");  
  
 } else if (strArr[index].charAt(0) == '=') {  
 if (strArr[index].equals("==")){  
 System.*out*.println("(==,210)");  
 }else{  
 System.*out*.println("(=,205)");  
 }  
   
 } else if (strArr[index].charAt(0) == '>') {  
 if (strArr[index].equals(">=")){  
 System.*out*.println("(>=,207)");  
 }else{  
 System.*out*.println("(>,206)");  
 }  
  
 } else if (strArr[index].charAt(0) == '<') {  
 if (strArr[index].equals("<=")){  
 System.*out*.println("(<=,209)");  
 } else if (strArr[index].equals("<>")) {  
 System.*out*.println("(<>,211)");  
 }else {  
 System.*out*.println("(<,211)");  
 }  
 } else if (strArr[index].charAt(0) == '(') {  
 System.*out*.println("((,301)");  
 } else if (strArr[index].charAt(0) == ')') {  
 System.*out*.println("(),302)");  
 } else if (strArr[index].charAt(0) == '{') {  
 System.*out*.println("({,303)");  
 } else if (strArr[index].charAt(0) == '}') {  
 System.*out*.println("(},304)");  
 } else if (strArr[index].charAt(0) == ';') {  
 System.*out*.println("(;,305)");  
 } else if (isId(strArr[index])){  
 */\*  
 满足标识符规则的同时包含Id和关键字,所以还需要判断是否是关键字  
 \*/* if(!isKey(strArr[index])){  
 System.*out*.println("(" + strArr[index] + ",400)");  
 }else {  
 for (int i = 0; i < keyWords.length; i++) {  
 if (strArr[index].equals(keyWords[i])) {  
 result = 101 + i;  
 System.*out*.println("(" + keyWords[i] + "," + result + ")");  
 break;  
 }  
 }  
 }  
  
 }else if(strArr[index].charAt(0) >= '0' && strArr[index].charAt(0) <= '9'){  
 System.*out*.println("(" + strArr[index] + ",500)");  
 }  
 }  
 }  
  
 *//如果字符串符合标识符命名规则,返回真* public boolean isId(String str){  
 char firstL = str.charAt(0);  
 *//符合标识符命名规则* if ((firstL >= 'a' && firstL <= 'z' )||(firstL >= 'A' && firstL <= 'Z')||firstL == '\_'){  
 return true;  
 }else{  
 return false;  
 }  
 }  
  
 public boolean isKey(String str){  
 for (int i = 0; i < keyWords.length; i++) {  
 if(str.equals(keyWords[i])){  
 return true;  
 }  
 }  
 return false;  
 }  
}

public class CompilerTest {  
 public static void main(String[] args) {  
 Compiler c = new Compiler();  
  
 String str = new String("void main ( ) { int sum1 = 1 ; int sum2 = 2 ; if ( a >= b ) a = a ++ ; }");  
 String[] strArr = c.strToArr(str);  
 c.analysis(strArr);  
  
 }  
}