

Exercise 1. List the tokens in the following *j--* program, stating their kinds, images, line numbers, and categories.

```
1 import java.lang.System;  
2  
3 public class Greetings {  
4     // Entry point.  
5     public static void main(String[] args) {  
6         System.out.println("Hi " + args[0] + "!");  
7     }  
8 }
```

SOLUTIONS

Solution 1.

Kind	Image	Line	Category
IMPORT	"import"	1	keyword
<IDENTIFIER>	"java"	1	identifier
DOT	"."	1	separator
<IDENTIFIER>	"lang"	1	identifier
DOT	"."	1	separator
<IDENTIFIER>	"System"	1	identifier
SEMI	";"	1	separator
PUBLIC	"public"	3	keyword
CLASS	"class"	3	keyword
<IDENTIFIER>	"Greetings"	3	identifier
LCURLY	"{"	3	separator
PUBLIC	"public"	5	keyword
STATIC	"static"	5	keyword
VOID	"void"	5	keyword
<IDENTIFIER>	"main"	5	identifier
LPAREN	"("	5	separator
<IDENTIFIER>	"String"	5	identifier
LBRACK	"["	5	separator
RBRACK	"]"	5	separator
<IDENTIFIER>	"args"	5	identifier
RPAREN	")"	5	separator

Kind	Image	Line	Category
LCURLY	"{"	5	separator
<IDENTIFIER>	"System"	6	identifier
DOT	"."	6	separator
<IDENTIFIER>	"out"	6	identifier
DOT	"."	6	separator
<IDENTIFIER>	"println"	6	identifier
LPAREN	"("	6	separator
<STRING_LITERAL>	"Hi "	6	literal
PLUS	"+"	6	operator
<IDENTIFIER>	"args"	6	identifier
LBRACK	"["	6	separator
<INT_LITERAL>	"0"	6	literal
RBRACK	"]"	6	separator
PLUS	"+"	6	operator
<STRING_LITERAL>	"!"	6	literal
RPAREN	")"	6	separator
SEMI	";"	6	separator
RCURLY	"}"	7	separator
RCURLY	"}"	8	separator
EOF	"<end of file>"	9	