

CS-141 Scope Exercise

Place variable name at top (gray area). Indicate an "d" where the variable is declared. Mark an x in boxes to indicate scope.

Can you say which variables are formal parameters(p) and which are arguments (a) (actual parameters)?

Note, there may be more than one variables with a given name. Use a separate column for each. What is the program output?

Line	Code	args						
1	public class Sample							
2	{							
3	public static void main(String[] args)	d,p						
4	{	x						
5	int i = 10;	x						
6	int b = g(i);	x						
7	System.out.println(b + i);	x						
8	}	x						
9								
10	public static int f(int i)							
11	{							
12	int n = 0;							
13	while (n * n <= i) { n++; }							
14	return n - 1;							
15	}							
16								
17	public static int g(int a)							
18	{							
19	int b = 0;							
20	for (int n = 0; n < a; n++)							
21	{							
22	int i = f(n);							
23	b = b + i;							
24	}							
25	return b;							
26	}							
27	}							