

Identify the variables in this program snippet as local or global. (1 point each)

```

01 | #include <iostream>
02 | using namespace std;
03 | int x = 5;                                // 1. x: Local      Global
04 | string str0 = "Megalovania";              // 2. str0: Local    Global
05 |                                         // 3. arr: Local     Global
06 | void foo(int arr[], int s, int* val) // 4. s: Local      Global
07 | {                                         // 5. val: Local     Global
08 |     int i = 0;                            // 6. i: Local      Global
09 |     for(i = 0; i < s/2; i++)
10 |         *val -= arr[i];
11 |
12 |     for(i; i < s; i++)
13 |         *val += arr[i];
14 |
15 |     for(i = 0; i < str0.length(); i++)
16 |         if(str0[i] == 'e' || str0[i] == 'a')
17 |             str0[i] = 'o';
18 |
19 | int main()
20 | {
21 |     int init[x] = {3, 6, 9, 0, 1}; // 7. init: Local    Global
22 |     int y = 15;                      // 8. y: Local      Global
23 |     foo(init, x, &y);
24 |     return 0;
25 | }
```

Identify the values of the following variables at the time the program reaches the specified line.

(2 points each)

9. Line 11, i = 2

10. Line 14, i = 5

11. Line 18, i = 11

12. Line 11, y = 6

13. Line 24, y = 16

14. Line 24, str0 = "Mogolovonio"