

Student ID \_\_\_\_\_

CSE 5A

Name \_\_\_\_\_

Quiz 5

Signature \_\_\_\_\_

Fall 2004

cs5a \_\_\_\_\_

This quiz is to be taken **by yourself** with closed books, closed notes, no calculators.

1. Consider the following program. Identify the **scope/visibility** of the marked parts of the program with the corresponding letter from the list below.

- A) This Source File (and No Other Source Files)
- B) The Function **foo1()**
- C) The Entire Program including Other Source Files
- D) The Function **foo2()**

```
#include <stdio.h>

#define SIZE 5

long fellow; _____

static int cling = 420; _____

int
foo1( char grade )
{
    _____ (foo1) _____ (grade)

    static int array[SIZE]; _____

    int result = 420; _____

    /* Other code here */
}

int
foo2( int array[], int size )
{
    _____ (foo2) _____ (array) _____ (size)

    int result; _____

    static int teaTime = 420; _____

    /* Other code here */
}
```

How many times is the variable **teaTime** in foo2() initialized to 420 if foo2() is called 5 times?  
\_\_\_\_\_ times

What is the initial value of variable **fellow** when this program is run? \_\_\_\_\_

What is the initial value of variable **result** in function foo2() when foo2() is called? \_\_\_\_\_

How many times is the variable **result** in foo1() initialized to 420 if foo1() is called 5 times?  
\_\_\_\_\_ times

(continued on other side)

2. Consider the following strings variable definitions.

```
char s1[] = "love";  
char s2[] = "to program!";  
char s3[] = "I am, therefore ...";  
char s4[80];
```

```
strcpy( s4, "CSE 5A!" );
```

What gets printed?

```
printf( "%c", s4[2] ); _____
```

```
printf( "%d", strlen( s4 ) ); _____
```

```
printf( "%d", sizeof( s1 ) ); _____
```

Fill in the blanks to complete the following tasks:

```
/* Change 'A' in string s4 to 'a' without explicitly assigning the value 'a' */
```

```
_____ = _____ ; /* Cannot have 'a' here! */
```

For example, you CANNOT do something like:      blahblahblah = 'a';

```
/* Change the ',' in string s3 to '!' */
```

```
_____ = '!';
```

```
/* The resulting output is "I love CSE 5A!" in a single printf() statement. */
```

```
printf( "%____ %____ %____", _____, _____, _____ );
```

3. What question would you like to see on the Final Exam?