

## FUNCTION QUIZ

1. What is printed by the following code?

```
#include<iostream>
using namespace std;
int findCode(char);
int main()
{
    char char1, char2, char3;
    char1 = 'S';
    char2 = '*';
    char3 = 'd';
    cout << "Press the following buttons: " << endl;
    cout << findCode(char1) << ' ' << findCode(char2) <<
        ' ' << findCode(char3) << endl;
    return 0;
}
int findCode(char c)
{
    if (c >= 'A' && c <= 'Z')
        return 3;
    else if (c == '*')
        return 2;
    else
        return 1;
}
```

## 2. Function Writing:

- a. Write the prototype of a value-returning function `allPositives`. This function takes three `double` parameters. It returns `true` if all three parameters are positive, and `false` otherwise.
  
- b. Write a sample call for this function. (Assume that you are calling from `main`)
  
- c. Write the definition (header and body) of the function.

## 3.

- a. What is the difference between a parameter sent by value and a parameter sent by reference?
  
- b. In question 4 on this quiz (on the next page!), which line (just put line number) has the **prototype** for the function `doubleSwap`?
  
- c. In question 4 on this quiz (on the next page!) which line (just put line number) has the **call** to the function `doubleSwap`?
  
- d. In question 4 on this quiz (on the next page!) which parameter(s) are sent by reference and which are sent by value?

4. What is printed by the following code?

```
1  #include<iostream>
2  using namespace std;
3  void doubleSwap(int, int &, int &);
4  int main()
5  {
6  int a = 10, b = 20, c = 30;
7  cout << a << b << c << endl;
8  doubleSwap(a, b, c);
9  cout << a << b << c << endl;
10
11 cout << '!' << a << endl;
12 }
13 void doubleSwap(int x, int & y, int & z)
14 {
15 x = y;
16 y = z * 2;
17 z = x * 2;
18 }
```