CS 161
Quiz 6 Solution

1) If a function doesn't return a value, the word _____ should appear as its return type.

   Functions that do not return values are void functions.

2) Either a function's _____ or its _____ must precede all calls to the function.

   It is necessary for the compiler to know information about a function so that it can verify that it is being properly called. This is accomplished by including either the function **prototype** or **definition** before any calls to the function.

   The function prototype or signature consists of the return type of the function, its name, and its parameter list followed by a semicolon.

   The function definition is the return type, name, and parameter list followed by a pair of braces {} that contain the code the is executed when the function is called.

3) Special variables that hold copies of function arguments are called _____.

   The variables that are used to hold the arguments of the function are called **parameters**. When the function is called in the program, the values of the arguments used in the call are stored in them.

4) A _____ eliminates the need to place a function definition before all calls to the function.

   A **function prototype** can be used before a function is called to provide information to the compiler. This allows the longer function definition to be located lower in the file or in a separate file.

5) A program contains the following function:

```
int cube(int num)
{
        return num * num * num;
}
```

Which statement passes the value 4 to this function and assigns its return value to the variable result.

The correct answer is:

```
result = cube(4);
```

6) A program contains the following function:

```
void display(int arg1, double arg2, char arg3)
{
cout << "Here are the values: "
          << arg1 << " " << arg2 << " " << arg3 << endl;
}
```

Which statement calls this function and passes the following arguments to it?

```
int age;
double income;
char initial;
```

The correct answer is

```
display(age, income, initial);
```

7) Arrange the statements below in the proper order for a function that receives three integer arguments and returns the largest of the three values. There are two extra lines that don't below in this function.

```
int biggest(int num1, int num2, int num3)
{
   if (num1 >= num2 && num1 >= num3)
      return num1;
   if (num2 >= num3)
      return num2;
   return num3;
}
```

not used:

```
   else if (num3 == num2)
    num3 = num1;
```