Quiz 3

17 October 2012

The following program fragments use loops. What is the output of each?

1.

```cpp
int i = 0;
while(i <= 4) {
    i = i + 1;
    cout << i << "\n";
}
```

2.

```cpp
int a = 8;
while(a > 4) {
    cout << a << "\n";
    a--;
}
```

3.

```cpp
int j = 2, k = 9;
while(j <= k) {
    j++;
    cout << j << ", " << k << "\n";
    k -= 2;
}
```

4.

```cpp
int z = 37;
while(z > 0) {
    cout << z%2;
    z /= 2;
}
cout << "\n";
```

5. The following program fragment contains a `switch` statement. What is the output?

```cpp
int b;
for(b = 1; b < 4; b++) {
    switch(b) {
    case 3:
        cout << "lime\n";
    case 2:
        cout << "orange\n";
        break;
    case 1:
        cout << "lemon\n";
    }
}
```

6. Convert the `while` loop from question #2 into a `for` loop:

```cpp
int a = 8;
while(a > 4) {
    cout << a << "\n";
    a--;
}
```