CIS 2107. Quiz 1a Solutions. Name:

The quiz is out of 20 points.

1. **2 points** What’s printed by the following code?

```java
public class WhatsPrinted1 {
    public static void func(int A[]) {
        int B[] = new int[A.length];
        for (int i=0; i<A.length; i++)
            B[i]=A[i]*10+1;
        A=B;
    }
    public static void main(String args[]) {
        int A[] = {10,20,30,40,50};
        func(A);
        System.out.println(A[2]);
    }
}
```

1. 30

2. **1 point** What would we type in the unix shell to change our current directory to the parent directory?

   **Solution:** cd ..

3. **1 point** What would we type in the unix shell in order to run a program called date, but writing its output to a file called dates.txt instead of the screen?

   **Solution:** date > dates.txt

4. **2 points** We’ve described the storage hierarchy of a computer as a kind of a pyramid. What two things are true the farther up pyramid you go?

   **Solution:** The farther up, the faster the access times but the more expensive it is so we have less of it.

5. **2 points** What’s the primary job of the C compiler? Note: it is not to find syntax errors.

   **Solution:** It’s to translate C into assembly.

6. **12 points** Write a function which is passed a C string. The function reverses the string. For example, if the string passed to your function is vacation, after the function, the string is noitacav. You may use functions in the Standard C Library. Please use the back of the page.
Solution: One possibility:

```c
#include <string.h>

void reverse_string(char s[]) {
    int i, j;
    char t;
    for (i=0, j=strlen(s)-1; i<j; i++, j--) {
        t=s[i];
        s[i]=s[j];
        s[j]=t;
    }
}
```