

CS101, Quiz 4

1. What is the output of the following program?

```
#include <iostream.h>
int f(int x, int y); void main(){
    int a=3, b=4, c=2;
    cout << a << endl;
    cout << b << endl;
    cout << c << endl;
    a += f(c,b);
    cout << a << endl;
    cout << b << endl;
    cout << c << endl;
} int f(int x, int y){
    x=x-1; y=y-1;
    int z=x+y;
    cout << z << endl;
    return z+2;
}
```

Output:

```
3
4
2
4
9
4
2
```

2. Give the values of the variables after the following piece of code has executed:

```
int i; int count=0; int prod=1;
for (i=1; i<=4; i++){
    count++;
    prod *= i;
}
```

i	prod	count
5	24	4

3. What is the output?

```
#include<iostream.h>
int f(int, int&);
void main(){
    int a=2, b=3;
    for (int i=1; i<=2; i++){
        cout << a << endl << b
            << endl << i << endl;
        a = f(i,b);
    }
}
int f(int x, int& y){
    y += x;
    return y+x;
}
```

Output:

```
2
3
1
5
4
2
```