

CS 250

Homework 2-3

A C program contains the following declarations:

```
int a = 1, b = 2;
```

Using the C rules of precedence, give the output of each of the following segments of code. If you cannot determine the value of a particular variable, show its value with a question mark. If you cannot determine the output according to the rules of C, explain why.

1.

```
if ( (a = b) != 0 ) {  
    printf ("True: a = %1d, b = %1d\n", a, b);  
} else {  
    printf ("False: a = %1d, b = %1d\n", a, b);  
}
```
2.

```
if ( a = b != 0 ) {  
    printf ("True: a = %1d, b = %1d\n", a, b);  
} else {  
    printf ("False: a = %1d, b = %1d\n", a, b);  
}
```
3.

```
if ( (a == b) != 0 ) {  
    printf ("True: a = %1d, b = %1d\n", a, b);  
} else {  
    printf ("False: a = %1d, b = %1d\n", a, b);  
}
```
4.

```
if ( a == (b != 0) ) {  
    printf ("True: a = %1d, b = %1d\n", a, b);  
} else {  
    printf ("False: a = %1d, b = %1d\n", a, b);  
}
```
5.

```
if ( a = b = 0 ) {  
    printf ("True: a = %1d, b = %1d\n", a, b);  
} else {  
    printf ("False: a = %1d, b = %1d\n", a, b);  
}
```