

Laboratory Worksheet #02

Logic Exercise

Answer the following questions given:

```
char a,b,c,d;
```

```
a = 0x00;
```

```
b = 0x0F;
```

```
c = 0x09;
```

What is the value of **d** after execution of the following lines?

1) **d = a & c;**

0x00

2) **d = b & c;**

0x09

3) **d = b & 0x04;**

0x04

4) **d = b & 0x33;**

0x03

5) **d = b & !c;**

0x00

Are the following TRUE or FALSE?

6) **(a && c)**

False

7) **(b && c)**

True

8) **(b && 0x04)**

True

What is the value of **d** after execution of the following lines?

9) **d = a | c;**

0x09

10) **d = b | 0x10;**

0x1F

11) **d = b | a;**

0x07

12) **d = b | !a;**

0x0F

Convert the following hex numbers to binary:

13) **(a || c)**

True

14) **(a || (c & 0x10))**

False

15) **(a || !b)**

False

When complete, include Worksheet 2 with your Laboratory 1-1 Pre-lab submission.