Bitwise Operations Test

```
a = ?
                                                       a = ?
int orig = 0x9090;
                                                       int orig = 0xB0B0;
int insert = 0x000F;
                                                       int insert = 0x0008;
int a = orig \mid (insert << 4);
                                                       int a = \text{orig } \land (\text{insert} << 4);
AND = ?
                                                       XOR = ?
int orig = 0xC0C0;
                                                       int orig = 0xD0D0;
int insert = 0x0008;
                                                       int insert = 0x0009;
int a = orig \mid (insert << 4);
                                                       int a = orig \mid (insert << 8);
int b = orig \mid (insert << 8);
                                                       int b = orig \mid (insert << 4);
int AND = a \mid b;
                                                       int XOR = a \wedge b;
result = ?
                                                       result = ?
long value1 = 0x11009900;
                                                       long value1 = 0x8008A00A;
long value 2 = 0x10019009:
                                                       long value 2 = 0x8080A0A0:
                                                       int result = (value1 << 12) ^( (value2 >> 4);
int result = (value1 << 4) ^ (value2 >> 12);
                                                       result = ?
result = ?
long value 1 = 740;
                                                       long value 1 = 361;
long value 2 = 354;
                                                       long value2 = 210;
int result = (value1 << 12) ^( (value2 >> 8);
                                                       int result = (value1 << 4) | (value2 >> 12);
cupcake = ?
                                                       a = ?
int i = 0x1010;
                                                       long testValue = 0x30031001;
int cupcake = i \& (1 << 12);
                                                       int a = 0:
                                                       if (testValue & (1 << 4))
                                                       a = 1;
                                                       else
                                                       a = 2;
```

```
a = ?
                                                    a = ?, result = ?
long testValue = 0xF0F0B0B0;
                                                    long testValue = 0x10101010;
int a = 0;
                                                    int a = 0;
if (testValue ^ testValue | (1 << 8))
                                                    if ((result = testValue & testValue | testValue
                                                    ^ (1 << 8)))
a = 1;
                                                    a = 1;
}
else
                                                     else
a = 2;
                                                    a = 2;
```