## **Bitwise Operations Test**

```
a = ?
                                                       a = ?
int orig = 0x9B50;
                                                       int orig = 0xA3C9;
int insert = 0x00EB;
                                                       int insert = 0x00F4;
int a = \text{orig } \& \text{ (insert } << 21);
                                                       int a = orig \mid (insert << 2);
AND = ?
                                                       OR = ?
int orig = 0x924C;
                                                       int orig = 0x3E91;
int insert = 0x00BC;
                                                       int insert = 0x00E5;
int a = orig \mid (insert << 10);
                                                       int a = orig \mid (insert << 29);
int b = orig \mid (insert << 22);
                                                       int b = orig \mid (insert << 7);
int AND = a \& b;
                                                       int OR = a \wedge b;
result = ?
                                                       result = ?
long value 1 = 0x5AEEF776;
                                                       long value 1 = 0xDD5D9988;
long value 2 = 0xF6A44BDA:
                                                       long value 2 = 0x33880C6D:
int result = (value1 << 7) ^ (value2 >> 3);
                                                       int result = (value1 << 25) ^ (value2 >> 26);
result = ?
                                                       result = ?
long value 1 = 9104;
                                                       long value 1 = 4291;
long value2 = 1383;
                                                       long value 2 = 4495;
int result = (value1 << 15) ^( (value2 >> 5);
                                                       int result = (value1 << 21) | (value2 >> 11);
right = ?
                                                       a = ?
int i = 0x514D;
                                                       long testValue = 0xA0F07040;
int right = i \land (1 << 10);
                                                       int a = 0:
                                                       if (testValue & (1 << 10))
                                                       a = 1;
                                                       else
                                                       a = 2;
```

```
a = ?
                                                    a = ?, result = ?
long testValue = 0x5E008B00;
                                                    long testValue = 0x500F800F;
int a = 0;
                                                    int a = 0;
                                                    if ((result = testValue | testValue & testValue
if (testValue | testValue & (1 << 30))
                                                    ^ (1 << 17)))
a = 1;
                                                    a = 1;
}
else
                                                    else
a = 2;
                                                    a = 2;
```