

Bitwise Operations Test - Answers

<pre>a = ? int orig = 0x9B50; int insert = 0x00EB; int a = orig & (insert << 21); ----- a = 0x0</pre>	<pre>a = ? int orig = 0xA3C9; int insert = 0x00F4; int a = orig (insert << 2); ----- a = 0xA3D9</pre>
<pre>AND = ? int orig = 0x924C; int insert = 0x00BC; int a = orig (insert << 10) int b = orig (insert << 22) int AND = a & b; ----- AND = 0x924C</pre>	<pre>OR = ? int orig = 0x3E91; int insert = 0x00E5; int a = orig (insert << 29) int b = orig (insert << 7) int OR = a ^ b; ----- OR = 0xA0004000</pre>
<pre>result = ? long value1 = 0x5AEEF776; long value2 = 0xF6A44BDA; int result = (value1 << 7) & (value2 >> 3); ----- result = 0x16508900</pre>	<pre>result = ? long value1 = 0xDD5D9988; long value2 = 0x33880C6D; int result = (value1 << 25) (value2 >> 26); ----- result = 0x1000000C</pre>
<pre>result = ? long value1 = 9104; long value2 = 1383; int result = (value1 << 15) ^ (value2 >> 5); ----- result = 0x11C8002B</pre>	<pre>result = ? long value1 = 4291; long value2 = 4495; int result = (value1 << 21) (value2 >> 11); ----- result = 0x18600002</pre>
<pre>right = ? int i = 0x514D; int right = i ^ (1 << 10); ----- right = 0x554D</pre>	<pre>a = ? long testValue = 0xA0F07040; int a = 0; if (testValue & (1 << 10)) { a = 1; } else { a = 2; } ----- a = 2</pre>

a = ?

```
long testValue = 0x5E008B00;
int a = 0;
if (testValue | testValue & (1 << 30))
{
    a = 1;
}
else
{
    a = 2;
}
-----
a = 1
```

a = ?, result = ?

```
long testValue = 0x500F800F;
int a = 0;
if ((result = testValue | testValue & testValue
^ (1 << 17)))
{
    a = 1;
}
else
{
    a = 2;
}
-----
a = 1, result = 1343193103
```