

Bitwise Operations Test - Answers

<p>a = ?</p> <pre>int orig = 0x2020; int insert = 0x0003; int a = orig ^ (insert << 12); ----- a = 0x1020</pre>	<p>a = ?</p> <pre>int orig = 0xB0B0; int insert = 0x0007; int a = orig (insert << 12); ----- a = 0xF0B0</pre>
<p>AND = ?</p> <pre>int orig = 0x8080; int insert = 0x0006; int a = orig (insert << 8) int b = orig (insert << 12) int AND = a & b;</pre>	<p>XOR = ?</p> <pre>int orig = 0xC0C0; int insert = 0x000F; int a = orig (insert << 12) int b = orig (insert << 4) int XOR = a b;</pre>
<p>result = ?</p> <pre>long value1 = 0x9090E0E0; long value2 = 0x9009E00E; int result = (value1 << 12) ^ (value2 >> 8);</pre>	<p>result = ?</p> <pre>long value1 = 0x6060B0B0; long value2 = 0x6600BB00; int result = (value1 << 8) ^ (value2 >> 4);</pre>
<p>result = ?</p> <pre>long value1 = 560; long value2 = 377; int result = (value1 << 4) ^ (value2 >> 8);</pre>	<p>result = ?</p> <pre>long value1 = 530; long value2 = 846; int result = (value1 << 12) ^ (value2 >> 8);</pre>
<p>right = ?</p> <pre>int i = 0x6060; int right = i & (1 << 4);</pre>	<p>a = ?</p> <pre>long testValue = 0xB0B0F0F0; int a = 0; if (testValue & (1 << 8)) { a = 1; } else { a = 2; }</pre>

a = ?

```
long testValue = 0x22009900;  
int a = 0;  
if (testValue ^ testValue & (1 << 8))  
{  
    a = 1;  
}  
else  
{  
    a = 2;  
}
```

a = ?, result = ?

```
long testValue = 0x2002A00A;  
int a = 0;  
if ((result = testValue ^ testValue & testValue  
    | (1 << 8)))  
{  
    a = 1;  
}  
else  
{  
    a = 2;  
}
```