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IN-CLASS EXERCISE

Bitwise operations

Assume this type definition for everything.
`typedef unsigned char uchar;`

1. Write the result of each expression. Assume all are unsigned char (8 bits).

expression	result
<code>0b00001011 0b11001001</code>	
<code>0b00001011 & 0b11001001</code>	
<code>0b00001011 >> 1</code>	
<code>0b00001011 << 1</code>	

2. Get one bit from a single byte.

```
uchar get_bit(uchar ch, int bit_idx) {

}
```

3. Set one bit in a single byte.

```
uchar set_bit(uchar ch, int bit_idx, uchar new_value) {

}
```

4. Get a few bits from a single byte.

```
uchar get_bits(uchar ch, int start_bit, int end_bit) { // end_bit is inclusive

}
```

5. Set a few bits on a single byte.

```
uchar set_bits(uchar ch, int bit_idx, uchar new_value, int num_bits) {

}
```

precedence of operators

