**Set, clear, toggle, check, a bit:**

number = 1 << x; //this will set bit x

number &= ~(1 << x); //this will clear bit x. Must invert the bit string with bitwise NOT then and

number ^= 1 << x; //this will toggle bit x

bit = number & (1 << x); //this will put the value of bit x into the variable bit

**Bit testing:**

If ((bits & 64) !=0) //check to see if bit 6 is set

if ((bits & (1 << 6)) != 0) //check to see if bit 6 is set

**Bit Setting and Clearing:**

bits = bits | (1 << 7); //sets bit 7 to 1

bits |= (1 << 7); // sets bit 7 to 1

bits &= ~(1 << 7); //clears bit 7

bits ^= (1 << 6) //flips bit 6