hw0206

In C11 manual 6.5.7 Bitwise shift operators,

> > > 5.The result of E1 >> E2 is E1 right-shifted E2 bit positions. If E1 has an unsigned type or if E1 has a signed type and a nonnegative value, the value of the result is the integral part of the quotient of E1 / 2E2. If E1 has a signed type and a negative value, the resulting value is implementation-defined.

So if variable bit is a signed type and a negative value(1<<31 = -2147483648), the resulting value is implementation-defined. Thus, if we want to fix this problem , we let the type of bit decome a unsigned type, like uint32_t, and will fix this problem.