COEN 20 Homework #3

Rick Sullivan

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21. (a)
```
int bit = 16;
int temp = x;
while(bit < 24){
    temp ^ = (1 << bit);
    if(temp > x) break;
    bit++;
}
x = temp;
```

    (b) `((short*)&x)[3] += 1;`

22. `A63F`

Characteristic	Bitwise Operators	Structure Bit Fields	Variant Acess	Unions
Messy syntax?	YES	NO	NO	NO
Ambiguous semantics?	NO	YES	YES	YES
Bit-field assignment restrictions?	NO	YES	YES	YES
More efficient code generation?	YES	YES	YES	NO

24. (the "Bit-field assignment restrictions?" row)

25. (a) `short value = (packed >> 8);`

    (b) `short value = packed.c[1];`