

# **CSC4200/5200 – COMPUTER NETWORKING**

## **PROGRAMMING ASSIGNMENT 2**

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# Setting Bits - Python

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```
def get_bit(num, i):  
    return (num & (1 << i)) != 0
```

```
print("{0:08b}".format(x))
```

```
def clear_bit(num, i):  
    mask = ~(1 << i)  
    return num & mask
```

```
def update_bit(num, i, bit):  
    mask = ~(1 << i)  
    return (num & mask) | (bit << i)
```

# Setting Bits - C++

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Set:

```
number |= 1UL << n; //set the nth bit
```

Clear:

```
number &= ~(1UL << n);
```

Check:

```
bit = (number >> n) & 1U;
```