# Special Binary 

## Last updated $1 / 3 / 23$

These slides introduce special binary number concepts

- The number of bits in a binary word are system dependent
- $8,16,32,64$
- Special binary numbers solve 2 problems
- Portability between systems
- Using the minimum memory needed
- There are different nomenclatures for special binary numbers
- We will use the special binary numbers available in <stdint.h>
- 8 bit integers
- uint8_t unsigned 8 bit
- int8_t signed 8 bit
- 16 bit integers
- uint16_t unsigned 16 bit
- int16_t signed 16 bit
- 32 bit integers
- uint32_t unsigned 32 bit
- int32_t signed 32 bit

