## Array

## Contiguous memory

char\* message = "hello"; char message[6] = "hello"; 0x01 0x02 0x03 0x04 0x06 0x08 0x0C 0x05 0x07 0x09 0x0A0x0B 'h' ' e ' '\0' 111 111 101 101 104 108 108 111 0 message[0] message[1] message[2] message[3] **Security Leak** message[4] message[5] Author: Alan Chu (ualch9@gmail.com) https://github.com/ualch9/cpts121-lab-presentations https://github.com/ualch9/cpts121-lab-presentations
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## Array (pointer notation)

Contiguous memory

```
char message[6] = "hello";
    char* message = "hello";
0x01
         0x02
                 0x03
                          0x04
                                   0x05
                                            0x06
                                                     0x07
                                                              0x08
                                                                       0x09
                                                                                0x0A
                                                                                         0x0B
                                                                                                  0x0C
                           'h'
                                    ' e '
                                             111
                                                     171
                                                              101
                                                                       '\0'
                                   101
                           104
                                            108
                                                     108
                                                              111
                                                                         0
                   *(message)
                   *(message + 1)
                           *(message + 2)
                                    *(message + 3)
                                                                                      Security Leak
                                             *(message + 4)
                                                       *(message + 5)
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```