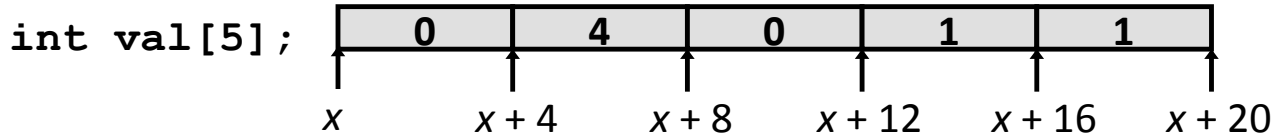


CSCI 2330 – Array Exercises

Consider the array shown below with the specified **int** contents, which starts at memory address x . For each expression given below, give the **type** of the expression (for example, **int** or **int***) and the **value** of the expression (which may be in terms of x). Assume that the machine is little-endian with 1-byte chars, 4-byte ints, and 8-byte longs.



Example Expression: $(5 + 3)$
Type: int
Value: 8

1. `val[4]`
2. `val`
3. `val + 1`
4. `&val[2]`
5. `*(val + 2)`
6. `val + i` (this expression may be in terms of i)
7. `val[5]`
8. `*((char *) val)` (casting `val` to `char *` before dereferencing it)
9. `*((long *) val)` (hint: remember endianness)
10. `2[val]` (hint: remember syntactic sugar)
11. `&val[0]`
12. `&&&*val`