

Pointer Arithmetic

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 - Pointers have a type
 - The type can be used to allow pointer arithmetic
 - Addition and subtraction of pointers is done in increments of the “type” size.
 - E.g. `ints` → 4Bytes, `chars` → 1Byte
 - The allowed operations on pointers are: `+`, `-`, `++`, `--`

```
int* foo;  
int* soo;  
int loo;
```

```
foo = &boo;           // assume boo is located at 0x1000 with value 25  
soo = foo + 2;       // soo now has the value 0x1008  
foo++;               // foo now has the value 0x1004  
loo = *(soo - 2);    // loo now equals 25
```

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```
char* foo;  
char* soo;  
char loo;
```

```
foo = &boo;           // assume boo is located at 0x1000 with value 'a'  
soo = foo + 2;       // soo now has the value 0x1002  
foo++;               // foo now has the value 0x1001  
loo = *(soo - 2);    // loo now equals 'a'
```