

9d - Valid Pointer Arithmetic Operators

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- ① Addition
- ② Subtraction
- ③ Comparison (= , != , > , <)

```
2
3 int main()
4 {
5
6     int a[] = {1,2,3,4,5};
7     int *p = a;
8     int *q = a+3;
9
10    printf("*p = %u\n", *p);
11    printf("*q = %u\n", *q);
12
13
14
15 }
```

*p = 1
*q = 4

De-referenced
pointer

```
2
3 int main()
4 {
5
6     int a[] = {1,2,3,4,5};
7     int *p = a;
8     int *q = a+3;
9
10    printf("*q = %u\n", *(q-1));
```

*q = 3

```
11
12
13
14 }
```

Difference between 2 pointer

```
3 int main()
4 {
5
6     int a[] = {1,2,3,4,5};
7     int *p = a;
8     int *q = a+3;
9
10    printf("%d\n", q-p);
11    printf("%d\n", p-q);
12
13
14 }
```

→ 3

→ -3

Comparison Operators

```
1 #include <stdio.h>
2
3 int main()
4 {
5
6     int a[] = {1,2,3,4,5};
7     int *p = a;
8     int *q = a+3;
9
10    if(p>q){
11        printf("p>q \n");
12    }
13 }
```

$q > p$