

Operators (1B)

some codes from cprogramex.wordpress.com

Copyright (c) 2009-2016 Young W. Lim.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

a1.c

```
#include <stdio.h>

int main(void) {
    int a[2] = { 11, 22};
    int *p;
    int v;

    //-----
    p = a; v = 0;

    printf("\nCASE 1: Before v = *p++; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));

    v = *p++;

    printf("CASE 1: After v = *p++; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));
}
```

a2.c

```
#include <stdio.h>

int main(void) {
    int a[2] = { 11, 22};
    int *p;
    int v;

    //-----
    p = a; v = 0;

    printf("\nCASE 2: Before v = (*p)++; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));

    v = (*p)++;

    printf("CASE 2: After v = (*p)++; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));
}
```

a3.c

```
#include <stdio.h>

int main(void) {
    int a[2] = { 11, 22};
    int *p;
    int v;

    //-----

    p = a; v = 0;

    printf("\nCASE 3: Before v = *++p; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));

    v = *++p;

    printf("CASE 3: After v = *++p; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));
}
```

a3.c

```
#include <stdio.h>

int main(void) {
    int a[2] = { 11, 22};
    int *p;
    int v;

    //-----

    p = a; v = 0;

    printf("\nCASE 4: Before v = ++*p; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));

    v = ++*p;

    printf("CASE 4: After v = ++*p; \n");
    printf("v = %d \n", v);
    printf("p = %p \n", p);
    printf("a+0= %p a[0]= %d \n", a+0, *(a+0));
    printf("a+1= %p a[1]= %d \n", a+1, *(a+1));
}
```

a3.c

a3.c

a3.c

a3.c

