

Lecture

- In the lecture on February, 15th we will discuss the rest of Chapter 2 (booting), and started with Chapter 3 (Process Concept).
- Prepare for the Tutorial Session on Thursday, February 18, 2010:
3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10, 3.11, 3.12

C programming exercises

From the online C tutorial <http://www.cprogramming.com/tutorial.html#ctutorial> read the parts Structures, Arrays, C-style Strings, File I/O, and Typecasting. In the tutorial session focus on pointers:

What will be the output of this C language program?

```
void inc_ptr(int* p){
    (*p)++;
    return;
}
int main(){
    int *p;
    *p=12;
    inc_ptr(p);
    printf("%d", *p);
    return 0;
}
```

What will be the output of this C language program?

```
void inc_ptr(int* p){
    (*p)++;
    return;
}

int main(){
    int o=12;
    int *p;
    p=&o;
    inc_ptr(p);
    printf("%d", *p);
    return 0;
}
```

What will be the output of this C language program?

```
#include <stdio.h>

main()
{
    int i, array[10];
    int *ip, *a1;
    int **ipp;

    ip = &i;
    ipp = &ip;
    a1 = &(array[1]);

    for (i = 0; i < 10; i++) array[i] = i;

    i = 11;

    printf("ip: 0x%x, &ip: 0x%x, array: 0x%x\n", ip, &ip, array);
    printf("\n");

    printf("&i: 0x%x\n", &i);
    printf("ipp: 0x%x, *ipp: 0x%x, **ipp: 0x%x\n", ipp, *ipp, **ipp);
    printf("\n");
    printf("a1: 0x%x, *a1: 0x%x\n", a1, *a1);

    a1 += 4;
    *a1 = 500;

    for (i = 0; i < 10; i++) {
        printf("%d ", array[i]);
    }
    printf("\n");
}
```