

## Homework 7

**posted Apr. 24, due Apr. 29 11:59pm (turn-in through email or paper during the day).**

(30pts) Register Allocation (postponed from hw6)

b. (20p) Exercise 11.1 in the textbook

c. (10p) Exercises 11.2 (a) in the textbook

(30p) Garbage collection.

Apply the Mark-Sweep (10p) and Copying (20p) GC to the following program at the end of the execution.

```
class B{
    int val;
    B next;
    static B gp;
}
...
F () {
    B head= new B(0, nil);
    B tail = head;
    for (int i=1; i< 5; i++) {
        tail.next=new B(i, nil);
        tail=tail.next;
    }
    head=head->next->next;
    gp=head;
    head=head->next;
}
```