CS 162
Intro to CS II

Friends and Operator Overload
Odds and Ends...

- Assignment #2 due Sunday, 12am
- Exam #1 Wed. 4/27
```cpp
#include "date.h"

card c, c1;
c1.set_suit(c);
c1.set_value(1);
c1 = c;
```

Card class constructors:
- date::date(const char *ml, const int d, const int y) : m(d) {
  month = new char[strlen(ml) + 1];
  strcpy(month, ml);
  day = d;
  year = y;
}
- date::date() : m(4) {
  //m=20;
  month = NULL;
  day = 0;
  year = 0;
}
- date::date(const date &other) : m(other.day) {
  cout << "in constructor" << endl;
  //month = other.month; //shallow copy
  month = new char[strlen(other.month) + 1];
  strcpy(month, other.month);
  day = other.day;
  year = other.year;
}

date::~date() {
  cout << "in destructor" << endl;
  delete[] month; //when obj goes out of scope, delete what month points to
}

goes into assignment overload.
never delete

Copy constructor:
- num_players
- num_cards = other.num_cards
- cards = new card[5];
- for (int i = 0; i < num_cards; i++)
  cards[i] = other.cards[i];
Print addresses and info to convince yourself...

```c
#include "date.h"

date print_date(date d)
{
    cout << d.get_month() << endl;
    cout << (void *) d.month << endl;
    cout << &(d.month) << endl;
    d.set_month("jan");
    cout << d.get_month() << endl;
    return d;
}

int main()
{
    date d;
    d.set_month("april");
    cout << d.get_month() << endl;
    cout << (void *) d.month << endl;
    cout << &(d.month) << endl;
    print_date(d);
    cout << d.get_month() << endl;
    cout << (void *) d.month << endl;
    cout << &(d.month) << endl;
    /*date dl=d;
    //d=date("jan",11,2016);

    -- INSERT --
```