OOP244 – Quiz #4

1. For the following class, fill in the definition with the following.

* Default constructor
* A custom constructor that takes
  + a char pointer named “name”
  + int named “name\_len”
  + char named “sex”
  + int called “day”
  + int called “month”
  + int called “year”
  + char pointer named “city”
  + int named “city\_len”
* A destructor

class Person {

char\* \_name;

char \_sex;

int \_day;

int \_month;

int \_year;

char\* \_city;

public:

Person();

Person(char\*, int, char, int, int, int, char\*, int);

~Person();

};

1. For the class above, write the functions for the following
   * The default constructor. Ensure everything is set into a safe state.
   * The custom constructor. Assign the values passed in to the data members as appropriate. For “name” and “city”, dynamically allocate “name\_len” for name and “city\_len” for city. Copy the strings passed in from name and city into their appropriate data members.
   * The destructor. Ensure no memory leaks.

Person(){

\_name = nullptr;

\_sex = 0;

\_day = 0;

\_month = 0;

\_year = 0;

\_city = nullptr;

}

~Person(){

If (\_name)

delete [] name;

if (\_city)

delete \_city;

}

Person(char\* name, int name\_len, char sex, int day, int month, int year, char\* city, int city\_len){

\_sex = sex;

\_day = day;

\_month = month;

\_year = year;

\_name = new char[name\_len];

\_city = new char[name\_len];

strcpy(\_name, name);

strcpy(\_city, city);

}