Dear Dr. Goulden

I tried to create small program files and intended to submit those. However, each question wants me to do something and crash the program. I can’t take a risk of it not even compiling for you. Se here it is in a word file.

Thanks,

Sanjiv

//R7.2

Person\* a = new Person("John", "Smith");

Person\* b = NULL;

Person\* c = new Person();

Person\* d = new Person("Jane", "Smith");

delete d;

d = NULL;

//R7.3 Dereferencing

string name\_a = a->getFirstName;

string name\_b = b->getFirstName;

string name\_c = c->getFirstName;

string name\_d = d->getFirstName;

//R.7.4 Delete once, Delete twice

delete a;

delete a; //in most cases it will crash the program.

//R.7.6

int a = 555;

int\* p = &a;

double b = 43.44;

double\* q = &b;

cout << (unsigned long) (p) << endl;

cout <<(unsigned long) (p+1) << endl; //ERROR - Crash

cout << (unsigned long) (q) << endl;

cout <<(unsigned long) (q + 1) << endl; // ERROR -Crash

Exercise R7.8

void f(int p[])

{

int\* q;

const int\* r;

int s[10];

//p is a pointer

p = q; //False p is an array pointer, q is an integer pointer

p = r; // False p is a pointer, r is a const int

p = s; // False; p is a pointer, s is an array

q = p; // False; assigning an array pointer p to an int pointer q

q = r; // False: q is a pointer, it can not accept a value

q = s; // False; q is an int pointer no and s is an array

r = p; // False; p is an array pointer and it can not be assigned to const r

r = q; // False, r can’t be re-assigned, it is a const

r = s; // False, r can’t be assigned, it is a const

s = p; //true;

s = q; //False; q is an int pointer, s is an array

s = r; // False, r is a const, s is an array

}

Exercise R7.9. Given the definitions

double values[] = { 2, 3, 5, 7, 11, 13 };

double\* p = values + 3;

explain the meanings of the following expressions:

a. values[1] : value of array member [] = 3

b. values + 1 :

c. \*(values + 1) : step up 1 in values[]

d. p[1] = values[4] = 11

e. p + 1 = values[5] = 13

f. p – values // invalid

Exercise R7.10. Explain the meanings of the following expressions:

a. "Harry" + 1 : step up 1 in char array “Harry”

b. \*("Harry" + 2) : Reference to [2] in array “Harry”

c. "Harry"[3] : value of position ‘3’ in array Harry - r

d. [4]"Harry" : Don’t know