CENG 241 Midterm 1 Fall 2007/2008

A **set** is probably the simplest kind of collection you can have. Here the objects are not usually ordered in any particular way at all and objects are simply added to the set without any control over where they go. The principal access mechanism that you have for a set is simply to check whether a given object is a member of the set or not. **For this reason, you cannot have duplicate objects in a set.**

Consider setA and setB objects as sets. The “set difference” between setA and setB is the set of all elements of setA that are **not in** setB. “set difference” is implemented as overloaded – (subtraction operator) in the main function. Define Set Class which contains necessary constructor(s) and methods so that the following function executes. (30p)

main()

{

 Set setA, setB, setC;

 setA.add(“ali”);

 setA.add(“bulent”);

 setA.add(“canan”);

 setA.add(“dogus”);

 setB.add(“canan”);

 setB.add(“dogus”);

 setB.add(“elif”);

 setB.add(“fliz”);

setC=setA-setB;

cout<<”setA(”<<setA.size()<< ”items ):”;

setA.Display();

cout<<”setB:”

setB.Display();

cout<<”Output setC:”

setC.Display();

setA.remove(“canan”);

}

Sample output:

set A (4 items): ali bulent canan dogus