**Exam 2 Notes**

Exam 2 will consist of 3 questions.

Question 1 will have you create a template only, no main.

Question 2 is similar to the following example. Note that it is perfectly fine for a C++ program to have 2 or more open text files at the same time. The following fragment reads in one text file and as it is being read in, a second text file is being calculated and saved. This is a very common industry application that is done all the time. Note also that we do not know how many grocery items there are in the first file.

A file of grocery items has already been saved to a text file called ITEMS.DAT. For each grocery item, the item name is on the first line of the file and the cost, quantity, and discount percentage are on the second line of the file.

Write a program fragment (**NOT A COMPLETE PROGRAM, NO DECLARATIONS, NO FUNCTIONS**) which will create a text file called COSTS.DAT which will contain the item name on the first line of the file and the total cost (cost \* quantity), discount (total cost \* discount percentage / 100) and the final cost (total cost – discount) on the second line of the file for each grocery item.

A picture of the files is as follows:

|  |  |  |
| --- | --- | --- |
| Ground Beef  7.550000 4 5.500000  Corn Flakes  4.560000 6 4.200000  .  .  . |  | Ground Beef  30.20000 1.661000 28.53900  Corn Flakes  27.36000 1.149120 26.21088  .  .  . |

ITEMS.DAT COSTS.DAT

ifstream infile("c:\\items.dat", ios::in);

ofstream outfile("c:\\costs.dat", ios::out);

while(infile.getline(name,40))

{

infile >> cost >> quantity >> discper;

total = cost \* quantity;

disc = total \* discper / 100;

final = total - disc;

outfile << name << endl;

outfile << total<< ' ' << disc << ‘ ‘ << final <<endl;

infile.ignore(40, '\n');

}

infile.close();

outfile.close();

Question 3 is a short answer question.