

Create a file called "Gunga.bin". Open this file using an ofstream file variable, and no parameters other than the file name. Store the data "Line of Text\n" into an array of characters. Write the string to the file three times. First, use the "<<" operator to write the whole string. Next, use the MyFile.put(MyChar) function call to write the characters of the string one at a time. Next use the function call MyFile.write(MyChar,strlen(MyChar)) to write the whole string to the file. Use the "<<" operator to add the following three lines to the file.

```
"0123456789\n"  
"abcdefghijklmnopqrstuvwxy\n"  
"ABCDEFGHIJKLMNopqrstuvwxyz\n"
```

Close the file.

Now re-open the file using an ifstream variable, and open it with the options ios::in, and ios::binary. Use the "get" function (MyBinaryFile.get()) to read the characters from the file. Read until you encounter eof, using a loop like the following.

```
int c = MyBinaryFile.get( );  
while (!MyBinaryFile.eof( ))  
{  
    // process character.  
    c = MyBinaryFile.get( );  
}
```

NOTE that the variable "c" is an int not a char. THIS IS NECESSARY FOR THE NEXT STEP!

Write out each character in hex, with ten characters per line. Put a space in front of each character. To write characters in hex, do the following:

```
cout<<hex<<MyChar;
```

The variable following the "hex" manipulator must be an int.

Put two blank lines after each line of text so you can add comments.

Print the output and identify the following:

1. The "\n" characters
2. Identify the character following the "\n" characters
3. Find the beginning of each line.
4. Identify the upper case alphabet.
5. Identify the lower case alphabet.
6. Identify the decimal digits.

Upload your program to the upload site. Call your program "HexChars.cpp".