Lab on enums CPS 171 J. Remen

This lab is to give you practice using enums.

Copy the following files on the t: drive and put them on your H: drive. t:\shared\class\cps\cps171\labs\enumslab.cpp t:\shared\class\cps\cps171\labs\ReFormat.dat

The .cpp file contains a basic outline of a program which you will modify using the data file provided. A hard copy of the file is given below. The comments describe what it is supposed to do but it does not compile at the present time.

You must replace the ***** in the function with an appropriate value from the enum and write the code for the switch statement in main.

Hand in a listing of the program file and the output file.

// Modified from the book - A laboratory course in C++ by Nell Dale

// by Janet Remen Oct 2000 as a lab for CPS 171.

// Program enumslab.cpp reads characters from file DataIn and

// writes them to DataOut with the following changes:

- // all letters are converted to uppercase, digits are
- // unchanged, and all other characters except blanks and
- // newline markers are removed.

#include <iostream>
#include <cctype>
#include <fstream>
using namespace std;

enum CharType {LO_CASE, UP_CASE, DIGIT, BLANK_NEWLINE, OTHER};

CharType kindOfChar(char); // function prototype // Gets the enumerator equivalent to its character input.

```
int main ()
{
ifstream dataIn;
ofstream dataOut;
char character;
CharType kind;
```

```
dataIn.open("ReFormat.dat");
dataOut.open("DataOut.txt");
```

```
dataIn.get(character); // priming read
  while (dataIn)
      kind = kindOfChar(character);
  {
      switch (kind)
                    // FILL IN THE Code to output the correct character
      {
             case // etc.
      }
                                 // get next character
      dataIn.get(character);
  }
  return 0;
}
CharType kindOfChar(char character)
// Post: character is converted to the corresponding
     constant in the enumeration type CharType.
//
{
  if (isupper(character))
      return *****; // TO BE FILLED IN
  else if (islower(character))
      return *****; // TO BE FILLED IN
  else if (isdigit(character))
       return *****; // TO BE FILLED IN
  else if (character == ' ' || character == '\n')
      return *****;// TO BE FILLED IN
  else
      return *****; // TO BE FILLED IN
}
```