## File Conversion -- Remove Control Blocking Data from Backups

The given data has been through a "backup" program which added extraneous data. Corrupt data ALWAYS starts with a CONTROL-C and always ends in a CONTROL-B. This PERL program removes these values. To do this I had to create a program that would read through the file, character by character, and only put non-corrupted values in the new file.

## Perl:

```
# File Conversion
# Xiana Lara
# 11/2/2020
# The given data has been through a "backup" program which added extraneous data
# Corrupt data ALWAYS starts with a CONTROL-C and always ends in a CONTROL-B
# This PERL program removes these values
# Input: Corrupt Data - control-char.txt
# Output: Clean Data - perl-control-char.txt
#!usr/bin/perl
open(FH, '<', 'control-char.txt');</pre>
open(FILE, '>', 'perl-control-char.txt');
#true
$flag = 1;
$temp = getc(FH);
while($temp || $temp eq 0){
   $tempNum = ord($temp);
   # ctrl+C
   if (tempNum == 0x03)
      $flag = 0; #false
   if ($flag){
      $myChar = chr($tempNum);
      print FILE $myChar;
   # ctrl+B
   if (tempNum == 0x02)
     $flag = 1;
```

```
}
$temp = getc(FH);

} # of while

# close the files
close (FILE);
close (FH);
```

C:\Users\xiana\OneDrive\Documents\school\PLStruc\fileConv\perl>perl fileConvPerl.pl
C:\Users\xiana\OneDrive\Documents\school\PLStruc\fileConv\perl>

```
perl-control-char - Notepad
File Edit Format View Help
    This is line 1 This is line 1 This is line 1
   This is line 2 This is line 2 This is line 2
This is line 3 This is line 3 This is line 3 A
   This is line 4 This is line 4 This is line 4
This is line 5 This is line 5 This is line 5
   This is line 6 This is line 6 This is line 6
This is line 7 This is line 7 This is line 7
   This is line 8 This is line 8 This is line 8 A
This is line 9 This is line 9 This is line 9
   This is line 10 This is line 10 This is line 10
This is line 11 This is line 11 This is line 11
   This is line 12 This is line 12 This is line 12 This is line 13 This is line 13
   This is line 14 This is line 14 This is line 14 This is line 15 This is line 14 This is line 15 This is line 1
   This is line 16 This is line 16 This is line 16 This is line 17 This is line 17
      This is line 18 This is line 18 This is line 18
    This is line 19 This is line 19 This is line 19
   This is line 20 This is line 20 This is line 20 B
This is line 21 This is line 21 This is line 21
      This is line 22 This is line 22 This is line 22
    This is line 23 This is line 23 This is line 23
      This is line 24 This is line 24 This is line 24
    This is line 25 This is line 25 This is line 25 B
   This is line 26 This is line 26 This is line 26 This is line 27 This line 27 This is line 27 T
      This is line 28 This is line 28 This is line 28
   This is line 29 This is line 29 This is line 29 This is line 30 This is line 
   This is line 31 This is line 31 This is line 31 This is line 31 This is line 32 This is line 32 This is line 32 This is line 32
    This is line 33 This is line 33 This is line 33
      This is line 34 This is line 34 This is line
    This is line 35 This is line 35 This is line 35
      This is line 36 This is line 36 This is line 36
   This is line 37 This is line 37 This is line 37 This is line 38 This is line 38 This is line 38
   This is line 39 This is line 39 This is line 39 This is line 40 \times 10^{-5}
   This is line 41 This is line 41 This is line 41 This is line 42 This is line 41 This is line 42 This is line 41 This is line 42 This is line 4
   This is line 43 This is line 43 This is line 43 This is line 44 This is line 44 This is line 44
   This is line 45 This is line 45 This is line 45 This is line 45 This is line 46 This is line 46 This is line 46 This is line 46
                                                                                                                                                                                                                                                                                                                                                                                                             control-char
   This is line 47 This is line 47 This is line 47 This is line 48 This is line 48 This is line 48 This is line 48
                                                                                                                                                                                                                                                                                                                                                                                                          fileConvPerl
   This is line 49 This is line 49 This is line 49 C This is line 50 This is line 50 This is line 50 D \,
                                                                                                                                                                                                                                                                                                                                                                                                          perl-control-char
```

## Java:

```
// File Conversion
// Xiana Lara
// 11/2/2020
// The given data has been through a "backup" program which added extraneous data
// Corrupt data ALWAYS starts with a CONTROL-C and always ends in a CONTROL-B
// This JAVA program removes these values
// Input: Corrupt Data - control-char.txt
// Output: Clean Data - java-control-char.txt
import java.io.*;
import java.util.*;
public class fileConvJava{
    public static void main (String args[])throws FileNotFoundException, IOExcept
ion{
        String filePath = "control-char.txt";
        File ogFile = new File(filePath);
        FileReader fRead = new FileReader(ogFile);
        BufferedReader buffRead = new BufferedReader(fRead);
        File fixedFile = new File("java-control-char.txt");
        fixedFile.createNewFile();
        FileWriter writeFile = new FileWriter("java-control-char.txt");
        // buffer
        int buff = 0;
        // if Ctrl+C
        boolean flag = true;
        while((buff = buffRead.read()) != -1){
            // crtl-c
            if(buff == 0x03){
               flag = false;
            if(flag){
```

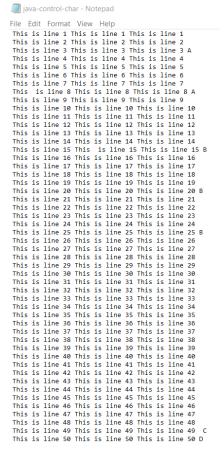
```
char tempChar = (char) buff;
    writeFile.write(tempChar);
}

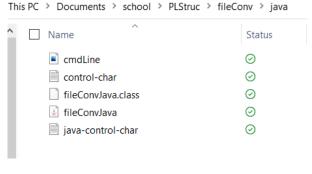
// ctrl-b
if(buff == 0x02){
    flag = true;
}

}// of while

writeFile.close();
}// of main
}//of class
```

C:\Users\xiana\OneDrive\Documents\school\PLStruc\fileConv\java>javac fileConvJava.java
C:\Users\xiana\OneDrive\Documents\school\PLStruc\fileConv\java>java fileConvJava
C:\Users\xiana\OneDrive\Documents\school\PLStruc\fileConv\java>

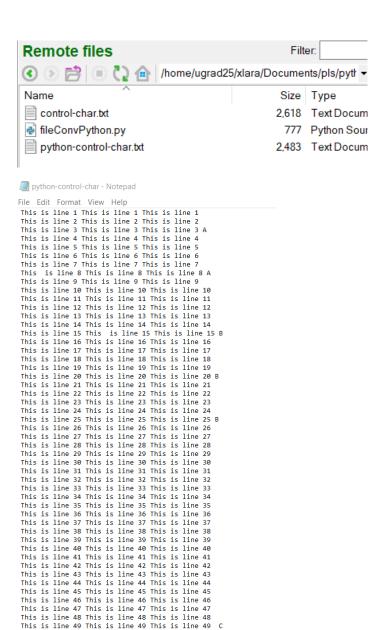




## Python:

```
# File Conversion
# Xiana Lara
# 11/2/2020
# The given data has been through a "backup" program which added extraneous data.
# Corrupt data ALWAYS starts with a CONTROL-C and always ends in a CONTROL-B
# This PYTHON program removes these values
# Input: Corrupt Data - control-char.txt
# Output: Clean Data - python-control-char.txt
def main():
    flag = False
    fixedFile = open("python-control-char.txt", "a")
    ogFile = open("control-char.txt", "r+")
    oneChar = ogFile.read(1)
    while (oneChar):
        if (ord(oneChar) == 3):
            flag = True
        if (flag == False):
            fixedFile.write(oneChar)
        if (ord(oneChar) == 2):
            flag = False
        oneChar = ogFile.read(1)
    fixedFile.close()
main()
```

```
xlara@lovelace:~/Documents/pls> cd python
xlara@lovelace:~/Documents/pls/python> python3 fileConvPython.py
xlara@lovelace:~/Documents/pls/python>
```



This is line 50 This is line 50 This is line 50 D