## 1.  Function and Use.

This small program will convert Big 5+ or GBK encoded Chinese characters into a 'preprocessed' form. The need of this program arises from the fact that these two encodings use the characters '\', '{', and '}' which have special meanings in TeX.

Use this program as a filter:

```
extconv < input_file > output_file
```

## 2.  The program.

The only function of this program is to replace all occurrences of Big 5+ and GBK encoded characters XY (X and Y are the first and the second byte of the character) with `^^7fX^^7fZZZ^^7f`, where ZZZ represents the second byte as a decimal number. `0x7F` is used as an active character and delimiter.

Additionally we define a TEX macro at the very beginning to signal a preprocessed file.

The following code is very simple. No error detection is done because TEX which will see the output of `extconv` complains loudly if something is wrong.

**#define** *banner*  `"extconv␣(CJK␣ver.␣4.6.0)"`

**#include** `<stdio.h>`
**#include** `<stdlib.h>`

   **int** *main*(*argc*, *argv*)
      **int** *argc*;
      **char** *∗argv*[ ];
  {**int** *ch*;

   *fprintf*(*stdout*, `"\\def\\CJKpreproc{%s}"`, *banner*);

   *ch* = *fgetc*(*stdin*);

   **while** (! *feof*(*stdin*))
    {**if** (*ch* ≥ $^\#$`81` ∧ *ch* ≤ $^\#$`FE`)
     {*fprintf*(*stdout*, `"\177%c\177"`, *ch*);

      *ch* = *fgetc*(*stdin*);
      **if** (! *feof*(*stdin*))
        *fprintf*(*stdout*, `"%d\177"`, *ch*);
     }
    **else**
     *fputc*(*ch*, *stdout*);

    *ch* = *fgetc*(*stdin*);
   }
  *exit*(`EXIT_SUCCESS`);
  **return** 0;                                                           /∗ never reached ∗/
  }