## 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.␣4.8.1)"`

**#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 */
  }
```