1. Function and Use.

This small program will convert SJIS encoded Japanese characters into a 'preprocessed' form. The need of this program arises from the fact that this encoding uses the characters '\', '{', and '}' which have special meanings in TEX.

Use this program as a filter:

```
sjisconv < input_file > output_file
```

2. The program.

The only function of this program is to replace all occurrences of SJIS encoded two byte characters `XY` with `^^7fX^^7fZZZ^^7f` (`X` and `Y` are the first and the second byte of the character; `ZZZ` represents the second byte as a decimal number).

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 `sjisconv` complains loudly if something is wrong.

```
#define banner "sjisconv␣(CJK␣ver.␣4.8.2)"

#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 ≤ #9F) ∨ (ch ≥ #E0 ∧ ch ≤ #EF))
        {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 */
   }
```