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 `XZZZ^^ff` (`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.

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

int main(argc, argv)
    int argc;
    char *argv[];
{int ch;
 fprintf(stdout, "\\def\\CJKpreproc{}");
 ch = fgetc(stdin);
 while (!feof(stdin))
  {if ((ch ≥ #81 ∧ ch ≤ #9F) ∨ (ch ≥ #E0 ∧ ch ≤ #EF))
    {fputc(ch, stdout);
     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 */
}
```