

```

/*
 * strings
 */

/*
 * Synopsis: strings < unix_PS_file.images_split >
 *           unix_PS_file.images_split.strings_isolated
 */

/*
 * Each / for defining a PostScript variable name is separated from its
 * predecessor by some white space or line break.
 *
 * Each string, which is a string of characters surround by ( and )
 * and in which an interior ) is escaped with a \, is made to begin on a
 * new line and if it is longer than 72 characters, the text following the
 * closed parenthesis at the end of the string also is made to begin on a
 * new line.
 *
 * Finally, except inside a string, a space or tab that occurs past
 * position 72 of an output line is converted into a ^J to help break the
 * text into editable lines.
 */

#include <stdio.h>
#define LIMIT 72

int i; /* position of current character in output line */
char curr, prev;
void in_string_loop();

main()
{
    /* look through non-string characters */
    prev = '\n';
    i = 0;
    curr = getchar();

    while (curr != EOF) {
        switch (curr) {

            /* put a space before a / that is not preceded by
            a NL, space, or tab */
            case('/'): {
                if (prev == '\n' ||
                    prev == ' ' ||
                    prev == '\t') {
                    printf("%c", curr);
                    i += 1;
                } else { /* prev is not NL or WS */
                    printf(" %c", curr);
                    i += 2;
                }
            }
            break;

            /* put a NL before a string that is not preceded by
            a NL and then deal with the inside of a string */
            case('('): {
                if (prev == '\n') {
                    printf("(" /*, curr */);
                    i += 1;
                } else { /* prev is WS or other */
                    printf("\n%c", curr);
                    i = 1;
                }
            }
        }
    }
}

```

```

        }
        in_string_loop();
        break;
    }

    /* if the current space or tab is after position LIMIT
    of the current output line, change it to a NL */
    case(' '):
    case('\t'): {
        if (i < LIMIT) {
            printf("%c", curr);
            i += 1;
        } else {
            printf("\n");
            i = 0;
        }
        break;
    }

    /* after a NL, reset the position to 0 */
    case('\n'): {
        printf("\n");
        i=0;
        break;
    }

    /* otherwise print the character and bump up the
    position */
    default: {
        printf("%c", curr);
        i += 1;
        break;
    }
} /* end switch */

    prev = curr;
    curr = getchar();
} /* end while */

exit(0);
}

void in_string_loop()
{
    /* loop until end of string */
    prev = curr;
    if ((curr = getchar()) == EOF) {exit(0);}

    while (curr != '\0') {

        /* if we have an escape, then output it and the next character
        without searching for end of string */
        if (curr != '\\') {
            printf("\\\\" /*, curr */);
            i += 1;
            prev = curr;
            if ((curr = getchar()) == EOF) {exit(0);}
            printf("%c", curr);
            i += 1;
        } else {

            /* otherwise output just the current character */
            printf("%c", curr);
            i += 1;
        }
    }
    if ((curr = getchar()) == EOF) {exit(0);}
}

```

```
    } /* end while */

    /* at the end of the string, if we are past the LIMIT position of
    the output line, move to the next line */
    if (i < LIMIT) {
        printf("%" /*, curr */);
        i += 1;
    } else {
        printf("\n" /*, curr */);
        prev = '\n';
        i=0;
    }

    return;
}
```