**C Program for FIFO SERVER**

#include <stdio.h>

#include <sys/stat.h>

#include <sys/types.h>

#include <fcntl.h>

#include <unistd.h>

#include <string.h>

#define FIFO\_FILE "fifo\_twoway.txt"

void reverse\_string(char \*);

int main() {

int fd;

char readbuf[80];

char end[10];

int to\_end;

int read\_bytes;

// creatng the fifo

mkfifo(FIFO\_FILE, S\_IFIFO|0640); // (path, mode)

strcpy(end, "end");

fd = open(FIFO\_FILE, O\_RDWR);

while (1) {

read\_bytes = read(fd, readbuf, sizeof(readbuf));

readbuf[read\_bytes] = '\0';

printf("FIFOSERVER: Received string: \"%s\" and length is %d\n", readbuf, (int)(strlen(readbuf)));

to\_end = strcmp(readbuf, end);

if (to\_end == 0) {

close(fd);

break;

}

reverse\_string(readbuf);

printf("FIFOSERVER: Sending Reversed String: \"%s\" and length is %d\n", readbuf, (int)strlen(readbuf));

write(fd, readbuf, strlen(readbuf));

/\* sleep - This is to make sure othr process reads this, otherwise this

  process would retrieve the message \*/

sleep(2);

}

return 0;

}

void reverse\_string(char \* str) {

int last, limit, first;

char temp;

last = strlen(str) - 1;

first = 0;

limit = last/2;

while (first < last) {

temp = str[first];

str[first] = str[last];

str[last] = temp;

first++;

last--;

}

return;

}