

## 10. Illustrate the concept of inter-process communication using message queue with a c program

Program:

```
#include <stdio.h>
#include <stdlib.h>
#include <errno.h>
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/msg.h>
#define PERMS 0644
struct my_msgbuf {
long mtype;
char mtext[200];
};
int main(void) {
struct my_msgbuf buf;
int msqid;
int toend;
key_t key;
if ((key = ftok("msgq.txt", 'B')) == -1) {
perror("ftok");
exit(1);
}
if ((msqid = msgget(key, PERMS)) == -1) { /* connect to the queue */
perror("msgget");
exit(1);
}
printf("message queue: ready to receive messages.\n");
for(;;) { /* normally receiving never ends but just to make conclusion
/* this program ends with string of end */
if (msgrcv(msqid, &buf, sizeof(buf.mtext), 0, 0) == -1) {
perror("msgrcv");
exit(1);
}
printf("rcvd: \"%s\"\n", buf.mtext);
toend = strcmp(buf.mtext, "end");
if (toend == 0)
break;
}
printf("message queue: done receiving messages.\n");
system("rm msgq.txt");
return 0;
} .
```

## OUTPUT:

```
A module you have imported isn't available at the moment. It will be available soon.
```