

Figure 5.5 C program for client in Sun RPC.

```
/* File : C.c - Simple client of the FileReadWrite service. */
#include <stdio.h>
#include <rpc/rpc.h>
#include "FileReadWrite .h"
main(int argc, char ** argv)
{
    CLIENT *clientHandle;
    char *serverName = "coffee";
    readargs a;
    Data *data;

    clientHandle= clnt_create(serverName, FILEREADWRITE,
        VERSION, "udp");    /* creates socket and a client handle*/
    if (clientHandle==NULL){
        clnt_pcreateerror(serverName); /* unable to contact server */
        exit(1);
    }
    a.f = 10;
    a.position = 100;
    a.length = 1000;
    data = read_2(&a, clientHandle); /* call to remote read procedure */
    ...
    clnt_destroy(clientHandle);    /* closes socket */
}
```

Figure 5.6 C program for server procedures in Sun RPC.

```
/* File S.c - server procedures for the FileReadWrite service */
#include <stdio.h>
#include <rpc/rpc.h>
#include "FileReadWrite.h"

void * write_2(writeargs *a)
{
    /* do the writing to the file */
}

Data * read_2(readargs * a)
{
    static Data result;    /* must be static */
    result.buffer = ...    /* do the reading from the file */
    result.length = ...    /* amount read from the file */
    return &result;
}
```