

CS39006 COMPUTER NETWORKS LABORATORY

ASSIGNMENT 4

Group 32

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Content

- documentation.txt
 - **makefile1**
 - **makefile2**
 - rsocket.h
 - rsocket.c
 - user1.c
 - user2.c
-

Steps to run the user programs

Step 1: Open the terminal and change directory

Change the directory to the folder which has all the content

```
cd path/to/content
```

Step 2: Use makefile1 to generate librsocket.a

Execute the following command

```
make -f makefile1
```

Step 3: Use makefile2 to create the two executable files to run from user1.c and user2.c respectively

Execute the following command

```
make -f makefile2
```

Step 4: Run the user processes

Duplicate the terminal and in one of them execute the following command

In Terminal 1

After executing the following command, the **user1** program waits for user to **input** a string (say **Madagascar**)

```
./user1
```

In the duplicated terminal, execute this command

In Terminal 2

After executing the following command, the **user2** program waits for **receiving messages** from **user1**

```
./user2
```

Step 5: Change the value of p and repeat

In **rsocket.h** the value of **p** is defined as a **macro**. Change this value and repeat the steps 1 to 4 again. As the value of **p** increases the acks or the messages are dropped with higher probability and it is observed takes more time for the same message to be transmitted fully (all the characters to be transmitted at least once) and the number of duplications also increases.

CLEAN

In order to clean up the extra files and revert back to the original content, execute the following commands.

```
make -f makefile1 clean  
make -f makefile2 clean
```