

Old otp_enc

```
//clears buffer and reads over encrypted data, which it then writes to the screen
memset(buffer, '\0', sizeof(buffer));
if (read(socketFD, buffer, sizeof(buffer) - 1) < 0){
    error("Error from reading socket\n");
}
```

Revised otp_enc

```
//clears buffer and reads over encrypted data, which it then writes to the screen
memset(buffer, '\0', sizeof(buffer));
bufferPointer = buffer;
read(socketFD, &charsLeft, sizeof(int));
while(charsLeft > SEND_AT_ONE_TIME){
    if (read(socketFD, bufferPointer, SEND_AT_ONE_TIME) < 0){
        error("Error from reading socket\n");
    }
    bufferPointer += SEND_AT_ONE_TIME;
    charsLeft -= SEND_AT_ONE_TIME;
}
read(socketFD, bufferPointer, charsLeft);
```

Old otp_enc_d

```
//encrypts the messages and sends over to client
encryptMessage(message, key, strlen(message));
write(establishedConnectionFD, message, strlen(message));
```

Revised otp_enc_d

```
//encrypts the messages and sends over to client
encryptMessage(message, key, strlen(message));
bufferPointer = message;
charsLeft = strlen(message);
send(establishedConnectionFD, &charsLeft, sizeof(int), 0);
while (charsLeft > SENT_AT_ONE_TIME){
    send(establishedConnectionFD, bufferPointer, SENT_AT_ONE_TIME, 0);
    charsLeft -= SENT_AT_ONE_TIME;
    bufferPointer += SENT_AT_ONE_TIME;
}
send(establishedConnectionFD, bufferPointer, charsLeft, 0);
```

Old otp_dec

```
memset(buffer, '\0', sizeof(buffer));
if (read(socketFD, buffer, sizeof(buffer) - 1) < 0){
    error("Error from reading socket\n");
}
```

Revised otp_dec

```
memset(buffer, '\0', sizeof(buffer));
bufferPointer = buffer;
read(socketFD, &charsLeft, sizeof(int));
while(charsLeft > SEND_AT_ONE_TIME){
    if (read(socketFD, bufferPointer, SEND_AT_ONE_TIME) < 0){
        error("Error from reading socket\n");
    }
    bufferPointer += SEND_AT_ONE_TIME;
    charsLeft -= SEND_AT_ONE_TIME;
}
read(socketFD, bufferPointer, charsLeft);
```

Old otp_dec_d

```
//decrypts the messages and sends over to client
decryptMessage(message, key, strlen(message));
write(establishedConnectionFD, message, strlen(message));
```

Revised otp_dec_d

```
//decrypts the messages and sends over to client
decryptMessage(message, key, strlen(message));
bufferPointer = message;
charsLeft = strlen(message);
send(establishedConnectionFD, &charsLeft, sizeof(int), 0);
while (charsLeft > SEND_AT_ONE_TIME){
    send(establishedConnectionFD, bufferPointer, SEND_AT_ONE_TIME, 0);
    charsLeft -= SEND_AT_ONE_TIME;
    bufferPointer += SEND_AT_ONE_TIME;
}
send(establishedConnectionFD, bufferPointer, charsLeft, 0);
```