# Programming Guide : Homework 3

This is a quick guide on how to start your homework 3 with the given sample code of homework 2. The objective of the sample code is to let students focus on fault tolerant system, and also to evaluate your homework fairly by having the same skelton. You can use your own source code of homework 2 as your baseline, but you are required to follow given gRPC interfaces(sns.proto) and following requirements:

## 1. Follow the Programming Guide HW2:

As you did in homework 2, you are supposed to follow the homework 2 guide.

## 2. Use Derive IClient class and make your own Client.

As requirements of homework 3 when the master server is killed the client should try to reconnect to another server. When this happens, the client should call the provided function “displayReConnectionMessage” so that we know to where the client is connected.

|  |
| --- |
| // client.h  void displayReConnectionMessage(const std::string& host, const std::string & port) {  std::cout << "Reconnecting to " << host << ":" << port << "..." << std::endl;  } |

## 3. Use DEBUG for printing your debug messages.

The skeleton does print everything on screen for you to interact with a user. You can print some debugging information during the development phase using “DEBUG” statement. Following is example.

|  |
| --- |
| // In the C++ source file,  #ifdef DEBUG  // your debugging messages  #endif |

|  |
| --- |
| //In the Makefile  DEBUG ?= 0  ifeq ($(DEBUG), 1)  CXXFLAGS+=-DDEBUG  else  CXXFLAGS+=-DNDEBUG  endif |

|  |
| --- |
| // in the command line  make DEBUG=0  //OR  make DEBUG=1 |

## 4. Contact TA if you have any questions