**●Protocol**

**namespace PACKET\_TYPE**

**{**

**enum C2LS**

**{**

**LOGIN\_REQUEST = 0,**

**ACCOUNT\_CREATE,**

**END**

**};**

**enum LS2C**

**{**

**LOGIN\_SUCCESS = C2LS::END,**

**LOGIN\_FAILED,**

**ACCOUNT\_CREATE\_SUCCESS,**

**ACCOUNT\_CREATE\_FAILED,**

**END**

**};**

**enum C2S**

**{**

**ROOM\_CREATE = LS2C::END,**

**ROOM\_JOIN,**

**ROOM\_LEAVE,**

**REQUEST\_INGAME\_START,**

**SEND\_BASEBALL\_NUMBER,**

**END**

**};**

**enum S2C**

**{**

**ROOM\_CREATE\_SUCCESS = C2S::END,**

**ROOM\_CREATE\_FAILED,**

**ROOM\_JOIN\_SUCCESS,**

**ROOM\_JOIN\_FAILED,**

**ROOM\_LEAVE\_SUCCESS,**

**ROOM\_LEAVE\_FAILED,**

**INGAME\_START\_SUCCESS,**

**INGAME\_START\_FAIELD,**

**RECEIVE\_BASEBALL\_NUMBER\_SUCCESS,**

**RECEIVE\_BASEBALL\_NUMBER\_FAIELD,**

**INGAME\_GIVE\_TURN,**

**INGAME\_WAIT\_TURN,**

**INGAME\_END,**

**END**

**};**

**};**

**namespace FAIL\_SIGNAL**

**{**

**enum ACCOUNT**

**{**

**NO\_EXIST,**

**ALREADY\_EXIST,**

**WRONG\_PASSWORD,**

**END**

**};**

**enum ROOM**

**{**

**ALREADY\_EXIST = ACCOUNT::END,**

**FULL\_ROOM,**

**END**

**};**

**enum IN\_GAME**

**{**

**NO\_EXIST\_OPPONENT = ROOM::END,**

**EXIST\_REPETITION\_NUMBER,**

**END**

**};**

**};**

**/// ---------- CLIENT <-> LOGIN SERVER ----------- ///**

**struct CLS\_LOGIN\_REQUEST**

**{**

**unsigned short TYPE;**

**char ID[MAX\_ID\_SIZE];**

**char PASSWORD[MAX\_PASSWORD\_SIZE];**

**};**

**struct CLS\_ACCOUNT\_CREATE**

**{**

**unsigned short TYPE;**

**char ID[MAX\_ID\_SIZE];**

**char PASSWORD[MAX\_PASSWORD\_SIZE];**

**};**

**struct LSC\_LOGIN\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct LSC\_LOGIN\_FAILED**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct LSC\_ACCOUNT\_CREATE\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct LSC\_ACCOUNT\_CREATE\_FAILED**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**/// ---------- CLIENT <-> GAME SERVER ----------- ///**

**struct CS\_ROOM\_CREATE**

**{**

**unsigned short TYPE;**

**unsigned short ROOM\_NUM;**

**char ID[MAX\_ID\_SIZE];**

**};**

**struct CS\_ROOM\_JOIN**

**{**

**unsigned short TYPE;**

**unsigned short ROOM\_NUM;**

**char ID[MAX\_ID\_SIZE];**

**};**

**struct CS\_ROOM\_LEAVE**

**{**

**unsigned short TYPE;**

**unsigned short ROOM\_NUM;**

**char ID[MAX\_ID\_SIZE];**

**};**

**struct CS\_REQUEST\_INGAME\_START**

**{**

**unsigned short TYPE;**

**unsigned short ROOM\_NUM;**

**char ID[MAX\_ID\_SIZE];**

**};**

**struct CS\_SEND\_BASEBALL\_NUMBER**

**{**

**unsigned short TYPE;**

**unsigned short ROOM\_NUM;**

**char ID[MAX\_ID\_SIZE];**

**unsigned short BASEBALL\_NUM;**

**};**

**struct SC\_ROOM\_CREATE\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_ROOM\_CREATE\_FAILED**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct SC\_ROOM\_JOIN\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_ROOM\_JOIN\_FAILED**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct SC\_ROOM\_LEAVE\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_ROOM\_LEAVE\_FAILED**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct SC\_INGAME\_START\_SUCCESS**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_INGAME\_START\_FAIELD**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct SC\_RECEIVE\_BASEBALL\_NUMBER\_SUCCESS**

**{**

**unsigned short TYPE;**

**unsigned short JUDGE\_STATUS;**

**};**

**struct SC\_RECEIVE\_BASEBALL\_NUMBER\_FAIELD**

**{**

**unsigned short TYPE;**

**unsigned short FAIL\_SIGNAL;**

**};**

**struct SC\_GIVE\_TURN**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_WAIT\_TURN**

**{**

**unsigned short TYPE;**

**};**

**struct SC\_INGAME\_END**

**{**

**unsigned short TYPE;**

**bool IsWIN;**

**};**