Help

```
#include "
href../../../mod/bs1d/bs1d_doublim/bs1d_doublim_h_src.pdfbs1d_doublim.h"
#define INC 1.0e-5 /*Relative Increment for Delta-Hedging*/

static int CallIn_KunitomoIkeda_91(double s, NumFunc_1 *L, NumFunc_1 *U, NumFunc
{

  double price, delta, out_price, out_delta, price_plus, price_minus;

  pnl_cf_call_bs(s, PayOff->Par[0].Val.V_PDOUBLE, t, r, divid, sigma, &price, &d
  CallOut_KunitomoIkeda_91(s, L, U, Rebate, PayOff, t, r, divid, sigma, &out_pri

  /*Price*/
  *ptprice = price - out_price;

  pnl_cf_call_bs(s * (1. + INC), PayOff->Par[0].Val.V_PDOUBLE, t, r, divid, sigm
  CallOut_KunitomoIkeda_91(s * (1. + INC), L, U, Rebate, PayOff, t, r, divid, si
  price_plus = price - out_price;

  pnl_cf_call_bs(s * (1. - INC), PayOff->Par[0].Val.V_PDOUBLE, t, r, divid, sigm
  CallOut_KunitomoIkeda_91(s * (1. - INC), L, U, Rebate, PayOff, t, r, divid, si
  price_minus = price - out_price;

  /*Delta*/
  *ptdelta = (price_plus - price_minus) / (2.*s * INC);

  return OK;
}

int CALC(CF_CallIn_KunitomoIkeda)(void *Opt, void *Mod, PricingMethod *Met)
{
  TYPEOPT *ptOpt = (TYPEOPT *)Opt;
  TYPEMOD *ptMod = (TYPEMOD *)Mod;
  double r, divid;

  r = log(1. + ptMod->R.Val.V_DOUBLE / 100.);
  divid = log(1. + ptMod->Divid.Val.V_DOUBLE / 100.);

  return  CallIn_KunitomoIkeda_91(ptMod->S0.Val.V_PDOUBLE, ptOpt->LowerLimit.Val
```

```
}

static int CHK_OPT(CF_CallIn_KunitomoIkeda)(void *Opt, void *Mod)
{
  Option *ptOpt = (Option *)Opt;
  TYPEOPT *opt = (TYPEOPT *)(ptOpt->TypeOpt);


  if ((opt->Parisian).Val.V_BOOL == FALSE)
    if ((opt->RebOrNo).Val.V_BOOL == NOREBATE)
      return strcmp(((Option *)Opt)->Name, "DoubleCallInEuro");
  return WRONG;

}

static int MET(Init)(PricingMethod *Met, Option *Opt)
{
  return OK;
}

PricingMethod MET(CF_CallIn_KunitomoIkeda) =
{
  "CF_CallIn_KunitomoIkeda",
  {{" ", PREMIA_NULLTYPE, {0}, FORBID}},
  CALC(CF_CallIn_KunitomoIkeda),
  {{"Price", DOUBLE, {100}, FORBID}, {"Delta", DOUBLE, {100}, FORBID} , {" ", PR
  CHK_OPT(CF_CallIn_KunitomoIkeda),
  CHK_ok,
  MET(Init)
} ;
```