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```
#include "schwartz.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"

static int MOD(Init)(Model *model)
{
    TYPEMOD *pt = (TYPEMOD *) (model->TypeModel);

    if (model->init == 0)
    {
        model->init = 1;
        model->nvar = 0;
        pt->T.Vname = "Current Date";
        pt->T.Vtype = DATE;
        pt->T.Val.V_DATE = 0.;
        pt->T.Viter = ALLOW;
        model->nvar++;

        pt->Divid.Vname = "Annual Dividend Rate";
        pt->Divid.Vtype = DOUBLE;
        pt->Divid.Val.V_DOUBLE = 0;
        pt->Divid.Viter = ALLOW;
        model->nvar++;

        pt->R.Vname = "Annual Interest Rate";
        pt->R.Vtype = DOUBLE;
        pt->R.Val.V_DOUBLE = 4.;
        pt->R.Viter = ALLOW;
        model->nvar++;

        pt->sigmad.Vname = "Sigma Delta";
        pt->sigmad.Vtype = PDOUBLE;
        pt->sigmad.Val.V_PDOUBLE = 0.0556;
        pt->sigmad.Viter = ALLOW;
        model->nvar++;

        pt->sigmas.Vname = "Sigma S";
        pt->sigmas.Vtype = PDOUBLE;
```

```
    pt->sigmas.Val.V_PDOUBLE = 0.374;
    pt->sigmas.Viter = ALLOW;
    model->nvar++;

    pt->alpha.Vname = "Alpha";
    pt->alpha.Vtype = PDOUBLE;
    pt->alpha.Val.V_PDOUBLE = 1.829;
    pt->alpha.Viter = ALLOW;
    model->nvar++;

    pt->Rho.Vname = "Correlation";
    pt->Rho.Vtype = RGDOUBLEM11;
    pt->Rho.Val.V_RGDOUBLEM11 = 0.882;
    pt->Rho.Viter = ALLOW;
    model->nvar++;

}
return OK;
}

TYPEMOD schwartz;
MAKEMOD(schwartz);
```