//------------------------------------------------------54-02.cpp

//------------------------------------------------------- 1

 struct man1 {

 char name[20];

 int dd,mm,yy;

 char \*zodiak;

 man1 \*next; }

 A1= {"Петров",1,10,1969,"Весы",NULL },

 B1= {"Сидоров",8,9,1958,"Дева",&A1 },

 \*p1 = &B1;

 void F1() { char c1,c2,c3,c4;

 c1 = A1.name[2]; c2 = B1.zodiak[3];  c3 = p1->name[3]; c4 = p1->next->zodiak[1]; }

c1 = ‘т’;

с2 = ‘а’;

с3 = ‘о’;

с4 = NULL;

 //------------------------------------------------------- 2

 struct man2 {

 char name[20];

 char \*zodiak;

 man2 \*next;

      }

C2[3] = {

      {"Петров","Весы",NULL },

      {"Сидоров","Дева",&C2[0] },

      {"Иванов","Козерог",&C2[1] }};

 void F2() { char c1,c2,c3,c4;

 c1 = C2[0].name[2]; c2 = C2[1].zodiak[3];

 c3 = C2[2].next->name[3];  c4 = C2[2].next->next->zodiak[1]; }

c1 = ‘т’;

с2 = ‘а’;

с3 = ‘н’;

с4 = NULL;

 //------------------------------------------------------- 3

 struct tree3 {

 int vv;

 tree3 \*l,\*r; }

 A3 = { 1,NULL,NULL },

B3 = { 2,NULL,NULL },

 C3 = { 3, &A3, &B3 },

 D3 = { 4, &C3, NULL },

 \*p3 = &D3;

 void F3() { int i1,i2,i3,i4;  i1 =A3.vv; i2 = D3.l->vv; i3 =p3->l->r->vv; i4 = p3->vv; }

i1 = 1;

i2 = 3;

I3 = 2;

I4 = 4;

 //------------------------------------------------------- 4

 struct tree4 {

 int vv;

 tree4 \*l,\*r;

 } F[4] =

 {

{ 1,NULL,NULL },

{ 2,NULL,NULL },

{ 3, &F[0], &F[1] },

{ 4, &F[2], NULL }

};

 void F4() { int i1,i2,i3,i4; i1 = F[0].vv; i2 = F[3].l->vv;   i3 = F[3].l->r->vv; i4 = F[2].r->vv; }

i1 = 1;

i2 = 1;

I3 = NULL;

I4 = 2;

 //------------------------------------------------------- 5

 struct list5 {

 int vv;

 list5 \*pred,\*next;

 };

 extern list5 C5,B5,A5;

 list5

A5 = { 1, &C5, &B5 },

B5 = { 2, &A5, &C5 },

C5 = { 3, &B5, &A5 },

\*p5 = &A5;

 void F5() { int i1,i2,i3,i4;

 i1 = A5.next->vv; i2 = p5->next->next->vv;

 i3 = A5.pred->next->vv; i4 = p5->pred->pred->pred->vv; }

i1 = 2;

i2 = 3;

I3 = 1;

I4 = 1;

 //------------------------------------------------------ 6

struct dat7 { int dd,mm,yy; }

 struct man7 {

 char name[20];

 dat7 \*pd;

 dat7 dd;

 char \*zodiak; }

            A7= {"Петров", &{ 17,7,1977 }, { 1,10,1969 }, "Весы" },

            B7= {"Сидоров", &{ 22,7,1982 }, { 8,9,1958 }, "Дева" },

 \*p7 = &B7;

 void F7() { int i1,i2,i3,i4; i1 = A7.dd.mm; i2 = A7.pd->yy; i3 = p7->dd.dd; i4 = p7->pd->yy; }

i1 = 7;

i2 = 10;

I3 = 8;

I4 = 1982;

 //------------------------------------------------------ 7

 struct dat8 { int dd,mm,yy; };

 struct man8 {

 char name[20];

 dat8 dd[3];

      } A8[2] = {

         {"Петров", {{1,10,1969},{8,8,1988},{3,2,1978}}},

         {"Иванов",{{8,12,1958},{12,3,1976},{3,12,1967}}}

 };

 void F8() { int i1,i2;  i1 = A8[0].dd[0].mm; i2 = A8[1].dd[2].dd; }

i1 = 10;

i2 = 3;

 //------------------------------------------------------ 8

 struct man9 {

 char name[20];

 char \*zodiak;

 man9 \*next;

      }

A9= {"Петров","Весы",NULL },

 B9= {"Сидоров","Дева",&A9 },

 \*p9[4] = { &B9, &A9, &A9, &B9 };

 void F9() { char c1,c2,c3,c4;

 c1 = p9[0]->name[2];

c2 = p9[2]->zodiak[3];

 c3 = p9[3]->next->name[3];

c4 = p9[0]->next->zodiak[1]; }

c1 = ‘д’;

с2 = ‘ы’;

с3 = ‘р’;

с4 = ‘е’;