37-847 Informatik   Musterlösung 5   WS03/04

1) Chaos Spiel

```cpp
#include <ifmwindow>
#include <stdlib.h>
#include <time.h>


int main()
{
    int size = 200;

    IfmWindow w(size, size, "Chaos-Spiel");

    srand((unsigned)time(NULL));

    while(true)
    {

        Point p[] = {
            Point(rand()%size, rand()%size),
            Point(rand()%size, rand()%size),
            Point(rand()%size, rand()%size)};

        Point x(rand()%size, rand()%size);

        for(int i = 0; i < 50000; ++i)
        {
            Point& q = p[rand()%3];
            x = Point((x.x() + q.x())/2, (x.y() + q.y())/2);
            w << x;
        }

        w.flush();
        w.wait_for_mouse_click();
        w.clear();
    }

    return 0;
}
```