

```
In[*]:= data = Import[
    "/Users/ivandybko/Projects/Numerical_methods/Lab5/src/data/sys2_1.txt",
    "Table"];
```

```
maxIterations = 30;
h1 = h2 = 0.5;
```

```
(*Создание цветовой палитры*)
colorFunction[n_] := If[n == -1, Red, GrayLevel[1 - n / maxIterations]];
```

```
(*Построение графика*)
graphics =
    Graphics[Table[Module[{x1 = data[[i, 1]], x2 = data[[i, 2]], iter = data[[i, 3]]},
        {colorFunction[iter], Rectangle[{x1 - h1 / 2, x2 - h2 / 2},
            {x1 + h1 / 2, x2 + h2 / 2}]}], {i, Length[data]}]];

```

```
(*Отображение графика*)
gr = Show[graphics, Axes → True,
    AxesLabel → {"x1", "x2"}, PlotStyle → {FontFamily → "Times"}]
```

Out[\*] =

