**Пересечение многоугольников**

int main()

{

ifstream cin("rect.in");

ofstream cout("rect.out");

const int MAX\_SIZE = int(1e9);

int n, minx = MAX\_SIZE + 1, miny = MAX\_SIZE, maxx = -1 \* MAX\_SIZE + 1, maxy = -1 \* MAX\_SIZE, xl, xr, yl, yr;

cin >> n;

for (int i = 0; i < n; i++)

{

cin >> xl >> yl >> xr >> yr;

maxx = max(maxx, xl);

minx = min(minx, xr);

maxy = max(maxy, yl);

miny = min(miny, yr);

}

if (minx >= maxx && miny >= maxy)

{

cout << maxx << " " << maxy << " " << minx << " " << miny << "\n";

}

else

{

cout << "-1\n";

}

return 0;

}