

[reset](#)[run](#)

```
1 // this algorithm dynamically computes the convex hull of a point set.
2 demo.P = demo.DynamicPointSet();
3 var H = demo.Polygon();
4 // dynamically compute the convex hull of the point set
5 demo.P.updateFunction = function(q) {
6     if (H.VertexList.length < 2) {
7         H.newVertex(q);
8         return;
9     }
10    var left = -1, right = -1;
11    for (var i = 0; i < H.VertexList.length; i++) {
12        if (H.orient(i, i+1, q) && H.orient(i, i-1, q)) { right = i; }
13        if (H.orient(i+1, i, q) && H.orient(i-1, i, q)) { left = i; }
14    }
15    // if q is outside the hull remove vertices and insert q
16    if (left != -1 && right != -1) {
17        var f = new CG_Face(new CG_Polygon([H.v(left), q, H.v(right)]));
18        demo.things[2] = [f];
19        H.replace(q, left, right);
20    }
21 };
22
23
```