

---

**Algorithm 2:** GETCELLSATCORNER algorithm

---

**Input:** a quadtree with cell envelopes  $Q$  and a cell  $c$ .

```
1 function GETCELLSATCORNER( $Q, c$ ):  
2    $region \leftarrow$  quadrant region of  $c$  in  $c.parent$   
3   switch  $region$  do  
4     case 'SW' do  
5        $corner \leftarrow$  left bottom corner of  $c.envelope$   
6     case 'SE' do  
7        $corner \leftarrow$  right bottom corner of  $c.envelope$   
8     case 'NW' do  
9        $corner \leftarrow$  left upper corner of  $c.envelope$   
10    case 'NE' do  
11       $corner \leftarrow$  right upper corner of  $c.envelope$   
12    end  
13     $cells \leftarrow$  cells which intersect  $corner$  in  $Q$   
14     $cells \leftarrow cells - c$   
15     $cells \leftarrow$  sort  $cells$  on basis of their depth  
16    return ( $cells, corner$ )  
17 end
```

---