

```

[> # the divisibility or bifurcation graph shows values (x,y) such that  $h(y) \bmod x$  is congruent to 0.
[>  $h := n^2 + n + 41$  :
[>  $x := \text{Vector}[\text{row}](291)$  :
[>  $y := \text{Vector}[\text{row}](291)$  :
[>  $\text{counter} := 1$  :
[> for  $a$  from 2 to 2000 do
[>   for  $b$  from 0 to  $a - 1$  do
[>     if  $\text{mod}(b^2 + b + 41, a) = 0$  then
[>        $x[\text{counter}] := a$  :
[>        $y[\text{counter}] := b$  :
[>        $\text{counter} := \text{counter} + 1$  :
[>     end if;
[>   end do;
[> end do;
[>  $\text{counter}$ 
[>
[> # note we read ...  $a$  from 2 to ... because we ignore divisibility by one.
[>
[>  $\text{plot}(x, y, \text{style} = \text{point}, \text{symbol} = \text{point})$ 
[>  $\text{plot}(x[1 ..100], y[1 ..100], \text{style} = \text{point}, \text{symbol} = \text{point})$ 

```

292

(1)