```
> # Heun algorithm
> # Group 1, initialize.
> f:=(x,y)->-y+1-x:
> x0:=0:y0:=3:h:=0.1:L:=[x0,y0]:
> # Group 2, repeat 10 times
> Y:=y0+h*f(x0,y0):
> Y:=y0+h*(f(x0,y0)+f(x0+h,Y))/2:
> x0:=x0+h:y0:=Y:L:=L,[x0,y0];
```

$$L := [0, 3], [0.1, 2.805000000], [0.2, 2.619025000], [0.3, 2.441217625], [0.4, 2.270801951], [0.5, 2.107075766], [0.6, 1.949403568], [0.7, 1.797210229], [0.8, 1.649975257], [0.9, 1.507227608], [1.0, 1.368540985] \quad (1)$$

```
> # Group 3, plot.
> plot([L]);
```