

**Table 1: Vertex records.**

vertex	coordinates	incident edge
a	(0,2)	$\vec{ba}$
b	(2,0)	$\vec{db}$
c	(2,4)	$\vec{dc}$
$\vdots$	$\vdots$	$\vdots$

**Table 2: Face records.**

face	boundary edge	hole list
$f_1$	$\vec{ab}$	<i>nil</i>
$f_2$	$\vec{fe}$	<i>nil</i>
$f_3$	<i>nil</i>	<i>nil</i>

**Table 3: Half-edge records.**

half-edge	origin	face	twin	next	prev
$\vec{fe}$	f	$f_2$	$\vec{ef}$	$\vec{ec}$	$\vec{df}$
$\vec{ca}$	c	$f_1$	$\vec{ac}$	$\vec{ab}$	$\vec{dc}$
$\vec{db}$	d	$f_3$	$\vec{bd}$	$\vec{ba}$	$\vec{fd}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$	$\vdots$	$\vdots$