

```

1  int num = 100;
2  int pre = 0;
3  int cur = 0;          16  /* thread 2 */
4  void main(){          17  {
5    cobegin{           18    int t;
6      /* thread 1 */   19    while(num > 0){
7      {                20      t = cur;
8      int t;           21      cur = last cur + pre;
9      while(num > 0){  22      last pre = t;
10     t = cur;         23      num = last num - 1;
11     cur = last cur + pre; 24    }
12     last pre = t;    25  coend
13     num = last num - 1; 26  }
14   }
15  }

```

(a) The original source code of fibonacci

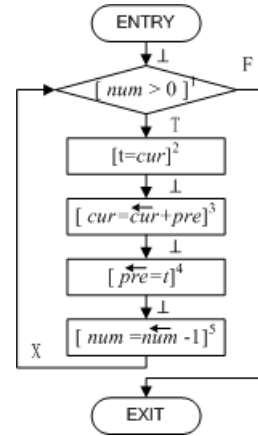
$T_1$  or  $T_2$

```

while([num > 0]1){
  [t = cur]2
  [cur =  $\overleftarrow{cur}$  + pre]3
  [ $\overleftarrow{pre}$  = t]4
  [num =  $\overleftarrow{num}$  - 1]5
}

```

(b) The labeled abstract code



(c) The flow graph of  $T$

$l$	$kill_{LH}$	$gen_{LH}$	$LH_{in}^{(1)}$	$LH_{out}^{(1)}$	$LH_{in}$	$LH_{out}$	$\mathcal{H}_a$	$\mathcal{H}_r$
1	$\{num\}$	$\emptyset$	$\emptyset$	$\{num\}$	$\emptyset$	$\{num\}$	$\{num\}$	$\{(num, F)\}$
2	$\{cur\}$	$\emptyset$	$\{num\}$	$\{num, cur\}$	$\{num\}$	$\{num, cur\}$	$\{cur\}$	$\emptyset$
3	$\{cur, pre\}$	$\{cur\}$	$\{num, cur\}$	$\{num, pre\}$	$\{num, cur\}$	$\{num, pre\}$	$\{pre\}$	$\{(cur, \perp)\}$
4	$\emptyset$	$\{pre\}$	$\{num, pre\}$	$\{num\}$	$\{num, pre\}$	$\{num\}$	$\emptyset$	$\{(pre, \perp)\}$
5	$\{num\}$	$\{num\}$	$\{num\}$	$\emptyset$	$\{num\}$	$\emptyset$	$\emptyset$	$\{(num, \perp)\}$

(d) The last holding analysis result and holding information of thread  $T_1$  or  $T_2$

**Figure 1.** Example: a fibonacci program.