



(a) `checkpoint()` in program.

```

1: function _UPDATE CFQ(_init_func[p1],P1_config1,argv1)
2:   tmp ← _init_func[p1]
3:   while tmp → next is not null do
4:     tmp ← tmp→next
5:     if tmp→func is P1_config1 then
6:       tmp→argv ← argv1
7:       return _init_func[p1]
8:     end if
9:   end while
10:  tmp→func ← P1_config1
11:  tmp→argv ← argv1
12:  return _init_func[p1]
13: end function
  
```

(b) Pseudo code of `_updateCFQ()`.