```
boolean flag [2];
int turn;
void P0()
{
     while (true) {
          flag [0] = true;
          turn = 1;
          while (flag [1] && turn == 1) /* do nothing */;
          /* critical section  */;
          flag [0] = false;
          /* remainder  */;
     }
}
void P1()
{
     while (true) {
          flag [1] = true;
          turn = 0;
          while (flag [0] && turn == 0) /* do nothing */;
          /* critical section  */;
          flag [1] = false;
          /* remainder  */
     }
}
void main()
{
     flag [0] = false;
     flag [1] = false;
     parbegin (P0, P1);
}
```

**Figure 5.3 Peterson's Algorithm for Two Processes**