```
entry:
                                                                  indQ
                                     curlnd ptr = &(ind[i0])
     cond0 = icmp gt N,0
                                                                           pop(indQ, curInd)
                                     curind = *curind ptr
     brTag = cond0? bb:return
                                                                           curNum ptr= &(x[curInd])
                                     push(indQ, curInd)
     push(br0Q, brTag)
     br brTag
                                    curind ptr
6
                                                    curind
    bb:
     i0 = phi [i1, bb], [0, entry]
                                      Memory Subsystem
     curlnd ptr = &(ind[i0])
     curind = *curind ptr
9
10
     push(indQ, curInd)
11
     prod ptr = &(product[i0])
                                 curInd ptr = &(ind[i0])
     push(prodPtrQ, prod ptr)
12
                                                                                 pop(indQ, curInd)
                                  curInd = *curInd ptr
                                                            curind ptr
13
     i1 = i0+1
                                                                         curInd
                                  send reg (curlnd ptr)
                                                                                 receive resp(curInd)
14
     cond1 = icmp eq i1, N
                                  push(indQ, curInd)
                                                                                 curNum ptr= &(x[curInd])
15
     brTag1 = cond1? bb2:bb
16
     push(br1Q, brTag1)
                                                            Memory Subsystem
```