```
void foo(int* mem, ...) {
                                                               Values from past profile
  bb48:
  bb70:
   ebp = *(mem+(ecx+eax*4)/sizeof(int));
   *(mem+(edi+eax*4)/sizeof(int)) = ebp;
   ebp = *(mem+(esi+eax*4-4)/sizeof(int));
                                                    Banerjee's
                                                                          Ld1
                                                                                  Ld2
                                                                                                 St2
   *(mem+(ebx+eax*4)/sizeof(int)) = ebp;
                                                                                          St1
                                                       test
   eax = eax+1;
                                                                          XXX
                                                                    St1
                                                                                 J****
                                                                                          (=,=)
   if(eax != edx)
     goto bb70;
                                                                          (*,*)
                                                                                 X*X
                                                                                          (*****)
                                                                                                (=,=)
                                                                     St2
  stk esp += 1;
  if(stk esp != edx)
   goto bb48;
                                                                                Ld1
                                                                               )=x*(
                                                                          St2
           Without Memory Barrier
                                                                  With Memory Barrier
void foo(int* restrict mem0, int* restrict mem1,
         int* restrict mem2...) {
                                                  void foo(int* restrict mem0, int* restrict mem1,
                                                           int* restrict mem2, int* restrict mem3...) {
 bb48:
                                                    bb48:
 bb70:
  ebp = *(mem0+(ecx+eax*4)/sizeof(int));
                                                    bb70:
  *(mem1+(edi+eax*4)/sizeof(int)) = ebp;
                                                     ebp = *(mem0 + (ecx + eax * 4)/sizeof(int));
  ebp = *(mem2+(esi+eax*4-4)/sizeof(int));
                                                     *(mem1+(edi+eax*4)/sizeof(int)) = ebp;
  *(mem0+(ebx+eax*4)/sizeof(int)) = ebp;
                                                     ebp = *(mem2 + (esi + eax*4 - 4)/sizeof(int));
                                                     *(mem3+(ebx+eax*4)/sizeof(int)) = ebp;
  eax = eax+1;
  if(eax != edx)
                                                     eax = eax+1:
    goto bb70;
                                                     if(eax != edx)
                                                       goto bb70;
 stk esp += 1;
                                                    barrier;
 if(stk esp!=edx)
  goto bb48;
                                                    stk esp += 1;
                                                   if(stk_esp != edx)
                                                     goto bb48;
```