```
void foo(int* mem, ...) {
 hh48:
                                                         Banerjee's test using values
  bb70:
                                                              from past profile
   ebp = *(mem+(ecx+eax*4)/sizeof(int));
   *(mem+(edi+eax*4)/sizeof(int)) = ebp;
                                                         Ld1
                                                                 Ld2
                                                                          St<sub>1</sub>
                                                                                 St<sub>2</sub>
   ebp = *(mem+(esi+eax*4-4)/sizeof(int));
   *(mem+(ebx+eax*4)/sizeof(int)) = ebp;
                                                         J***J
                                                                 J****
                                                                          (=,=)
                                                                               J****
                                                    St1
   eax = eax+1;
                                                          (*,*)
                                                                 XX
                                                                         X*X)
                                                                                (=,=)
                                                    St2
   if(eax != edx)
     goto bb70;
                                                          D**
 stk esp += 1;
 if(stk esp!=edx)
   goto bb48;
           Without Memory Barrier
                                                                 With Memory Barrier
void foo(int* restrict mem0, int* restrict mem1,
                                                   void foo(int* restrict mem0, int* restrict mem1,
         int* restrict mem2...) {
                                                            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));
  eax = eax+1;
                                                      *(mem3+(ebx+eax*4)/sizeof(int)) = ebp;
  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;
```