```
entry:
                                                                                                   %a.addr = alloca [100 x i32]*, align 8
                                                                                                   %b.addr = alloca [100 \text{ x i} 32]*, align 8
                                                                                                         %i.addr = alloca i32, align 4
                                                [4/7]
                                                                                                         %j.addr = alloca i32, align 4
                  for.cond:
                                                       ; preds = %for.inc, %entry
                                                                                                         %tmp = alloca i32, align 4
                                                                                                                                                        for.end:
                                  \%0 = \text{load i} 32, i 32* \% k, align 4
                                                                                                           %k = alloca i32, align 4
                                                                                                                                                                   %11 = load i32, i32* %tmp, align 4
                                   %cmp = icmp slt i32 %0, 100
                                                                                            store [100 x i32]* %a, [100 x i32]** %a.addr, align 8
                           br i1 %cmp, label %for.body, label %for.end
                                                                                           store [100 x i32]* %b, [100 x i32]** %b.addr, align 8
                                                                                                      store i32 %i, i32* %i.addr, align 4
                                                                                                      store i32 %j, i32* %j.addr, align 4
                                                                                                       store i32 0, i32* %tmp, align 4
                                                                                                         store i32 0, i32* %k, align 4
                                                                                                             br label %for.cond
                                                                                                              [5/6]
                                                                                    for.body:
                                                                                                                         ; preds = %for.cond
                                                                                     %1 = load [100 \times i32]^*, [100 \times i32]^{**} %a.addr, align 8
                                                                                               %2 = load i32, i32* %i.addr, align 4
                                                                                                  %idxprom = sext i32 %2 to i64
                                                                        %arrayidx = getelementptr inbounds [100 x i32], [100 x i32]* %1, i64 %idxprom
                                                                                                 %3 = load i32, i32* %k, align 4
                                                                                                 %idxprom1 = sext i32 %3 to i64
                                                               %arrayidx2 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx, i64 0, i64 %idxprom1
                         [0/1]
                                                                                             %4 = load i32, i32* %arrayidx2, align 4
for.inc:
                                   ; preds = %for.body
                                                                                     %5 = load [100 \times i32]^*, [100 \times i32]^{**} %b.addr, align 8
           %10 = \text{load i} 32, i 32* \% k, align 4
                                                                                                 \%6 = \text{load i}32, i32* \%k, align 4
              %inc = add nsw i32 %10, 1
                                                                                                 %idxprom3 = sext i32 %6 to i64
            store i32 %inc, i32* %k, align 4
                                                                       %arrayidx4 = getelementptr inbounds [100 x i32], [100 x i32]* %5, i64 %idxprom3
                  br label %for.cond
                                                                                               \%7 = \text{load i32}, \text{i32* } \% \text{j.addr, align 4}
                                                                                                 %idxprom5 = sext i32 %7 to i64
                                                               %arrayidx6 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx4, i64 0, i64 %idxprom5
                                                                                             %8 = load i32, i32* %arrayidx6, align 4
                                                                                                  %mul = mul nsw i32 %4, %8
                                                                                                \%9 = \text{load i} 32, i 32* \% \text{tmp, align } 4
                                                                                                 %add = add nsw i32 %9, %mul
                                                                                               store i32 %add, i32* %tmp, align 4
                                                                                                         br label %for.inc
```

[8/9]

[2/3]

ret i32 %11

; preds = %for.cond