```
%k = alloca i32, align 4
                                                                            \%0 = \text{load i}32, i32* \%k, align 4
store [100 x i32]* %a, [100 x i32]** %a.addr, align 8
                                                                             %cmp = icmp slt i32 %0, 100
                                                                      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 = \text{load i} 32, i 32* \% k, align 4
                                  %idxprom1 = sext i32 \% 3 to i64
  %arrayidx2 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx, i64 0, i64 %idxprom1
                              %4 = load i32, i32* % arrayidx2, align 4
                       %5 = load [100 \times i32]^*, [100 \times i32]^{**} %b.addr, align 8
                                  \%6 = \text{load i}32, i32* \%k, align 4
                                  %idxprom3 = sext i32 %6 to i64
        %arrayidx4 = getelementptr inbounds [100 x i32], [100 x i32]* %5, i64 %idxprom3
                                %7 = load i32, i32* %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 = load i32, i32* %tmp, align 4
                                  %add = add nsw i32 %9, %mul
                                store i32 %add, i32* %tmp, align 4
                                          br label %for.inc
```

for.cond:

[4/7]

; preds = %for.inc, %entry

for.inc:

[0/1]

%10 = load i 32, i 32* % k, align 4

%inc = add nsw i32 %10, 1

store i32 %inc, i32* %k, align 4

br label %for.cond

; preds = % for.body

[8/9] entry: %a.addr = alloca [100 x i32]*, align 8%b.addr = alloca $[100 \times i32]$ *, align 8 %i.addr = alloca i32, align 4 %j.addr = alloca i32, align 4

%tmp = alloca i32, align 4

[2/3] for.end: ; preds = %for.cond %11 = load i32, i32* %tmp, align 4 ret i32 %11