```
[2/3]
                    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
                                  %idxprom 1 = sext i 32 \% 3 to i 64
%arrayidx2 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx, i64 0, i64 %idxprom1
                              %4 = load i32, i32* %arrayidx2, align 4
                      \%5 = \text{load} [100 \text{ x i} 32]^*, [100 \text{ x i} 32]^{**} \% \text{b.addr, align } 8
                                  \%6 = \text{load i} 32, i 32* \% 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 = \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
```

for.cond:

[4/5]

%0 = load i32, i32* %k, align 4 %cmp = icmp slt i32 %0, 100 br i1 %cmp, label %for.body, label %for.end

; preds = %for.inc, %entry

[0/1]

for.inc:

; preds = %for.body

%10 = load i32, i32* %k, align 4
%inc = add nsw i32 %10, 1
store i32 %inc, i32* %k, align 4
br label %for.cond