for.cond: ; preds = %for.inc, %entry %0 = load i32, i32* %k, align 4 %cmp = icmp slt i32 %0, 100 br i1 %cmp, label %for.body, label %for.end

```
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
```

```
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
                             %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
       %arravidx4 = 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
```