

```
for.cond4:                                ; preds = %for.inc, %for.body3
    %k.0 = phi i32 [ 1, %for.body3 ], [ %inc, %for.inc ], !dbg !980
    call void @llvm.dbg.value(metadata i32 %k.0, metadata !975, metadata !DIExpression()), !dbg !978
    %cmp5 = icmp slt i32 %k.0, 5, !dbg !982
    br i1 %cmp5, label %for.body6, label %for.end, !dbg !983
```

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graph TD
    Cond4[for.cond4] --> Body6[for.body6]
    Cond4 --> Inc[for.inc]
    Body6 --> Cond4
    Inc --> Cond4
```

```
for.body6:                                ; preds = %for.cond4
    %add = add nsw i32 %i.0, %j.0, !dbg !984
    %add7 = add nsw i32 %add, %k.0, !dbg !986
    %div = sdiv i32 %add7, 3, !dbg !987
    call void @llvm.dbg.value(metadata i32 %div, metadata !988, metadata !DIExpression()), !dbg !989
    %idxprom = sext i32 %i.0 to i64, !dbg !990
    %arrayidx = getelementptr inbounds [100 x [10 x [5 x i32]]], [100 x [10 x [5 x i32]]]* %a, i64 0, i64 %idxprom, !dbg !990
    %idxprom8 = sext i32 %j.0 to i64, !dbg !990
    %arrayidx9 = getelementptr inbounds [10 x [5 x i32]], [10 x [5 x i32]]* %arrayidx, i64 0, i64 %idxprom8, !dbg !990
    %idxprom10 = sext i32 %k.0 to i64, !dbg !990
    %arrayidx11 = getelementptr inbounds [5 x i32], [5 x i32]* %arrayidx9, i64 0, i64 %idxprom10, !dbg !990
    %0 = load i32, i32* %arrayidx11, align 4, !dbg !990
    %add12 = add nsw i32 %0, %div, !dbg !991
    %idxprom13 = sext i32 %i.0 to i64, !dbg !992
    %arrayidx14 = getelementptr inbounds [100 x [10 x [5 x i32]]], [100 x [10 x [5 x i32]]]* %a, i64 0, i64 %idxprom13, !dbg !992
    %idxprom15 = sext i32 %j.0 to i64, !dbg !992
    %arrayidx16 = getelementptr inbounds [10 x [5 x i32]], [10 x [5 x i32]]* %arrayidx14, i64 0, i64 %idxprom15, !dbg !992
    %idxprom17 = sext i32 %k.0 to i64, !dbg !992
    %arrayidx18 = getelementptr inbounds [5 x i32], [5 x i32]* %arrayidx16, i64 0, i64 %idxprom17, !dbg !992
    store i32 %add12, i32* %arrayidx18, align 4, !dbg !993
    br label %for.inc, !dbg !994
```

```
for.inc:                                    ; preds = %for.body6
    %inc = add nsw i32 %k.0, 1, !dbg !995
    call void @llvm.dbg.value(metadata i32 %inc, metadata !975, metadata !DIExpression()), !dbg !978
    br label %for.cond4, !dbg !996, !llvm.loop !997
```