

```
for.cond18:                                ; preds = %for.inc33, %for.body17
    %k.0 = phi i32 [ 1, %for.body17 ], [ %inc34, %for.inc33 ], !dbg !1012
    call void @llvm.dbg.value(metadata i32 %k.0, metadata !1007, metadata !DIExpression()), !dbg !1010
    %cmp19 = icmp slt i32 %k.0, 5, !dbg !1014
    br i1 %cmp19, label %for.body20, label %for.end35, !dbg !1015
```

```
graph TD
    A["for.cond18: ..."] --> B["for.inc33: ..."]
    A --> C["for.body20: ..."]
    C --> C
```

```
for.inc33:                                ; preds = %for.body20
    %inc34 = add nsw i32 %k.0, 1, !dbg !1023
    call void @llvm.dbg.value(metadata i32 %inc34, metadata !1007, metadata !DIExpression()), !dbg !1010
    br label %for.cond18, !dbg !1024, !llvm.loop !1025
```

```
for.body20:                                ; preds = %for.cond18
    %idxprom21 = sext i32 %i10.0 to i64, !dbg !1016
    %arrayidx22 = getelementptr inbounds [100 x [10 x [5 x i32]]], [100 x [10 x [5 x i32]]]* %a, i64 0, i64 %idxprom21, !dbg !1016
    %idxprom23 = sext i32 %j14.0 to i64, !dbg !1016
    %arrayidx24 = getelementptr inbounds [10 x [5 x i32]], [10 x [5 x i32]]* %arrayidx22, i64 0, i64 %idxprom23, !dbg !1016
    %sub = sub nsw i32 %k.0, 1, !dbg !1018
    %idxprom25 = sext i32 %sub to i64, !dbg !1016
    %arrayidx26 = getelementptr inbounds [5 x i32], [5 x i32]* %arrayidx24, i64 0, i64 %idxprom25, !dbg !1016
    %0 = load i32, i32* %arrayidx26, align 4, !dbg !1016
    %add = add nsw i32 %0, 1, !dbg !1019
    %idxprom27 = sext i32 %i10.0 to i64, !dbg !1020
    %arrayidx28 = getelementptr inbounds [100 x [10 x [5 x i32]]], [100 x [10 x [5 x i32]]]* %a, i64 0, i64 %idxprom27, !dbg !1020
    %idxprom29 = sext i32 %j14.0 to i64, !dbg !1020
    %arrayidx30 = getelementptr inbounds [10 x [5 x i32]], [10 x [5 x i32]]* %arrayidx28, i64 0, i64 %idxprom29, !dbg !1020
    %idxprom31 = sext i32 %k.0 to i64, !dbg !1020
    %arrayidx32 = getelementptr inbounds [5 x i32], [5 x i32]* %arrayidx30, i64 0, i64 %idxprom31, !dbg !1020
    store i32 %add, i32* %arrayidx32, align 4, !dbg !1021
    br label %for.inc33, !dbg !1022
```