

```
for.cond21:                                ; preds = %for.inc36, %for.body19
      %9 = load i32, i32* %j20, align 4
      %cmp22 = icmp slt i32 %9, 100
      br i1 %cmp22, label %for.body23, label %for.end38
```

```
graph TD
    cond21[for.cond21] --> body23[for.body23]
    body23 --> inc36[for.inc36]
    inc36 --> cond21
    cond21 --> cond21
```

```
for.body23:                                ; preds = %for.cond21
      %10 = load i32, i32* %i16, align 4
      %idxprom24 = sext i32 %10 to i64
      %arrayidx25 = getelementptr inbounds [100 x [100 x i32]], [100 x [100 x i32]]* %a, i64 0, i64 %idxprom24
      %11 = load i32, i32* %j20, align 4
      %idxprom26 = sext i32 %11 to i64
      %arrayidx27 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx25, i64 0, i64 %idxprom26
      %12 = load i32, i32* %arrayidx27, align 4
      %13 = load i32, i32* %i16, align 4
      %idxprom28 = sext i32 %13 to i64
      %arrayidx29 = getelementptr inbounds [100 x [100 x i32]], [100 x [100 x i32]]* %b, i64 0, i64 %idxprom28
      %14 = load i32, i32* %j20, align 4
      %idxprom30 = sext i32 %14 to i64
      %arrayidx31 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx29, i64 0, i64 %idxprom30
      %15 = load i32, i32* %arrayidx31, align 4
      %add = add nsw i32 %12, %15
      %16 = load i32, i32* %i16, align 4
      %idxprom32 = sext i32 %16 to i64
      %arrayidx33 = getelementptr inbounds [100 x [100 x i32]], [100 x [100 x i32]]* %c, i64 0, i64 %idxprom32
      %17 = load i32, i32* %j20, align 4
      %idxprom34 = sext i32 %17 to i64
      %arrayidx35 = getelementptr inbounds [100 x i32], [100 x i32]* %arrayidx33, i64 0, i64 %idxprom34
      store i32 %add, i32* %arrayidx35, align 4
      br label %for.inc36
```

```
for.inc36:                                ; preds = %for.body23
      %18 = load i32, i32* %j20, align 4
      %inc37 = add nsw i32 %18, 1
      store i32 %inc37, i32* %j20, align 4
      br label %for.cond21
```