```
for.cond:
                                                                       ; preds = %for.inc, %entry
                                                   \%0 = \text{load i} 32, i 32*\% i, align 4
                                                                                                           for.end:
                                                                                                                                               ; preds = \% for .cond
                                                    %cmp = icmp ult i32 %0, 100
                                                                                                                                   ret i32 0
                                             br i1 %cmp, label %for.body, label %for.end
                                                                              for.body:
                                                                                                                  ; preds = \% for.cond
                                                                                           %1 = load i32, i32* %i, align 4
                                                                                                % sub = sub i32 %1, 1
for.inc:
                                  ; preds = \% for.body
                                                                                          %idxprom = zext i32 %sub to i64
            %4 = load i32, i32* \%i, align 4
                                                               % arrayidx = getelementptr inbounds [100 x i32], [100 x i32]* % a, i64 0, i64 % idxprom
                 %inc = add i32 %4, 1
                                                                                       %2 = load i32, i32* %arrayidx, align 4
            store i32 %inc, i32* %i, align 4
                                                                                           %3 = load i32, i32*\%i, align 4
                                                                                          %idxprom1 = zext i32 %3 to i64
                  br label %for.cond
                                                              %arrayidx2 = getelementptr inbounds [100 x i32], [100 x i32]* %a, i64 0, i64 %idxprom1
                                                                                       store i32 %2, i32* %arrayidx2, align 4
                                                                                                  br label %for.inc
```

entry:

%retval = alloca i32, align 4
%a = alloca [100 x i32], align 16
%i = alloca i32, align 4
store i32 0, i32* %retval, align 4
store i32 1, i32* %i, align 4
br label %for.cond