```
[10/11]
                                                                                                                               while.body:
                                                                                                                                                                   ; preds = %while.cond
                                                                                                                                         %conv = sext i32 %i.0 to i64, !dbg !1317
                                                                                                                                     %mul = mul i64 %product.1, %conv, !dbg !1318
                                                                                                           call void @llvm.dbg.value(metadata i64 %mul, metadata !1301, metadata !DIExpression()), !dbg !1302
                                                                                                                                     %cmp2 = icmp ugt i64 %mul, 500000, !dbg !1319
                                                                                                                                  br i1 %cmp2, label %if.then, label %if.end, !dbg !1321
                                             [0/1]
                                                                                                                            while.cond:
                                                                                                                                                                ; preds = %if.end, %for.body
                    if.end:
                                                      ; preds = %while.body
                                                                                                                       %product.1 = phi i64 [ %product.0, %for.body ], [ %mul, %if.end ], !dbg !1313
                          \%idxprom4 = sext i32 \%i.0 to i64. !dbg !1324
                                                                                                         call void @llvm.dbg.value(metadata i64 %product.1, metadata !1301, metadata !DIExpression()), !dbg !1302
%arrayidx5 = getelementptr inbounds [100 x i32], [100 x i32]* %a, i64 0, i64 %idxprom4, !dbg !1324
                                                                                                                                       %idxprom = sext i32 %i.0 to i64, !dbg !1315
                       \%1 = \text{load i} 32, i 32* \% \text{ arrayid} x5, align 4, !dbg !1325}
                                                                                                             %arrayidx = getelementptr inbounds [100 x i32], [100 x i32]* %a, i64 0, i64 %idxprom, !dbg !1315
                             %dec = add nsw i32 %1, -1, !dbg !1325
                                                                                                                                    %0 = load i32, i32* %arrayidx, align 4, !dbg !1315
                       store i32 %dec, i32* %arrayidx5, align 4, !dbg !1325
                                                                                                                                         %cmp1 = icmp sgt i32 %0, 0, !dbg !1316
                        br label %while.cond, !dbg !1311, !llvm.loop !1326
                                                                                                                              br i1 %cmp1, label %while.body, label %while.end, !dbg !1311
                                                                        for.cond:
                                                                                                           ; preds = %for.inc, %entry
                                                                                                                                                                                                                [6/7]
                                                                          %i.0 = phi i32 [0, %entry], [%inc, %for.inc], !dbg !1307
                                                                                                                                                                                       for.inc:
                                                                                                                                                                                                                         ; preds = %while.end
                                                                                                                                                                                                                                                                                                    [8/9]
                                                                    %product.0 = phi i64 [ 1, %entry ], [ %product.1, %for.inc ], !dbg !1302
                                                                                                                                                                                                                                                                          while.end:
                                                                                                                                                                                                %inc = add nsw i32 %i.0, 1, !dbg !1329
                                                                                                                                                                                                                                                                                                              ; preds = %while.cond
                                                  call void @llvm.dbg.value(metadata i64 %product.0, metadata !1301, metadata !DIExpression()), !dbg !1302
                                                                                                                                                                                                                                                                                         br label %for.inc, !dbg !1328
                                                                                                                                                                  call void @llvm.dbg.value(metadata i32 %inc, metadata !1303, metadata !DIExpression()), !dbg !1305
                                                      call void @llvm.dbg.value(metadata i32 %i.0, metadata !1303, metadata !DIExpression()), !dbg !1305
                                                                                                                                                                                           br label %for.cond, !dbg !1330, !llvm.loop !1331
                                                                                 %cmp = icmp ule i32 %i.0, 100, !dbg !1309
                                                                           br i1 %cmp, label %for.body, label %for.end, !dbg !1310
                                                                                                    [2/3]
```

; preds = % for.cond

br label %while.cond, !dbg !1311

for.body: