```
tail call void asm sideeffect "NOP
                                                                                                      %scevgep = getelementptr i32, i32* %a, i64 1000
                                                                                                     %scevgep29 = getelementptr i32, i32* %b, i64 1000
%bound0 = icmp ugt i32* %scevgep29, %a
                                                                                                      %bound1 = icmp ugt i32* %scevgep, %b
                                                                                                      %found.conflict = and i1 %bound1, %bound0
                                                                                                      br i1 %found.conflict, label %for.body.preheader, label
                                                                                                     ... %vector.body.preheader
                                                                                                                                                              F
                                                                                                                       50.00%
                                                                                                                                                                50.00%
                                                                                                                          vector.body.preheader:
                                                                                                                           \%0 = \text{bitcast i} 32* \%a \text{ to } <4 \text{ x i} 32>*
                                                                                                                           store <4 x i32> <i32 0, i32 2, i32 4, i32 6>, <4 x i32>* %0, align 4, !tbaa
                                                                                                                          ... !34, !alias.scope !38, !noalias !41
                                                                                                                          %1 = getelementptr inbounds i32, i32* %a, i64 4
                                                                                                                           %2 = bitcast i32*\%1 to <4 x i32>*
                                                                                                                          store <4 x i32> <i32 8, i32 10, i32 12, i32 14>, <4 x i32>* %2, align 4,
                                                                                for.body.preheader:
                                                                                                                           ...!tbaa !34, !alias.scope !38, !noalias !41
                                                                                                                          %3 = bitcast i32* %b to <4 x i32>*
                                                                                 br label %for.body
                                                                                                                           store <4 x i32> <i32 10, i32 11, i32 12, i32 13>, <4 x i32>* %3, align 4,
                                                                                                                          ...!tbaa!34,!alias.scope!41
                                                                                                                          %4 = getelementptr inbounds i32, i32* %b, i64 4
                                                                                                                          \%5 = bitcast i32*\%4 to <4 x i32>*
                                                                                                                           store <4 x i32> <i32 14, i32 15, i32 16, i32 17>, <4 x i32>* %5, align 4,
                                                                                                                           .. !tbaa !34, !alias.scope !41
                                                                                                                           br label %vector.body.1
                                                                                                                              vector.body.1:
                                                                                                                               %index.next5 = phi i64 [ 8, %vector.body.preheader ], [ %index.next,
                                                                                                                               ... %vector.body.1 l
                                                                                                                               \%6 = phi < 4 \times i32 > [ < i32 0, i32 2, i32 4, i32 6 >, %vector.body.preheader ],
                                                                                                                               ... [ %20, %vector.body.1 ]
                                                                                                                               %vec.ind364 = phi <4 \times i32> [ <i32.0, i32.1, i32.2, i32.3>,
                                                                                                                               ... %vector.body.preheader ], [ %vec.ind.next39.1, %vector.body.1 ]
                                                                                                                               %vec.ind323 = phi <4 \times i32> [ <i32.0, i32.1, i32.2, i32.3>,
                                                                                                                               ... %vector.body.preheader ], [ %vec.ind.next35.1, %vector.body.1 ]
                                                                                                                               %index2 = phi i64 [ 0, %vector.body.preheader ], [ %index.next.1,
                                                                                                                               ... %vector.body.1 ]
                                                                                                                               %7 = getelementptr inbounds i32, i32* %a, i64 %index.next5
                                                                                                                               \%8 = \text{add} < 4 \times i32 > \%6, < i32 16, i32 16, i32 16, i32 16 > \%8
                                                                                                                               \%9 = \text{add} < 4 \times i32 > \%6, < i32\ 24, i32\ 24, i32\ 24, i32\ 24 > \%6
                                                                                                                               %10 = bitcast i32* \%7 to <4 x i32>*
                                                                                                                               store <4 x i32> %8, <4 x i32>* %10, align 4, !tbaa !34, !alias.scope !38,
                                                                                                                               ... !noalias !41
                                                                                                                               %11 = getelementptr inbounds i32, i32* %7, i64 4
for.body:
%indvars.iv = phi i64 [ %indvars.iv.next.1, %for.body ], [ 0,
                                                                                                                               %12 = bitcast i32* %11 to <4 x i32>*
 . %for.body.preheader ]
                                                                                                                               store <4 x i32> %9, <4 x i32>* %12, align 4, !tbaa !34, !alias.scope !38,
%arrayidx = getelementptr inbounds i32, i32* %a, i64 %indvars.iv
%indvars.iv.tr = trunc i64 %indvars.iv to i32
                                                                                                                               %13 = getelementptr inbounds i32, i32* %b, i64 %index.next5
                                                                                                                               %14 = add <4 x i32> %vec.ind364, <i32 18, i32 18, i32 18, i32 18>
%32 = shl i32 %indvars.iv.tr, 1
 store i32 %32, i32* %arrayidx, align 4, !tbaa !34
                                                                                                                               %15 = add <4 x i32> %vec.ind364, <i32 22, i32 22, i32 22, i32 22>
%arrayidx2 = getelementptr inbounds i32, i32* %b, i64 %indvars.iv
                                                                                                                               %16 = bitcast i32* %13 to <4 x i32>*
%33 = add nuw nsw i32 %indvars.iv.tr, 10
                                                                                                                               store <4 x i32> %14, <4 x i32>* %16, align 4, !tbaa !34, !alias.scope !41
                                                                                                                               %17 = getelementptr inbounds i32, i32* %13, i64 4
store i32 %33, i32* %arrayidx2, align 4, !tbaa !34
                                                                                                                               %18 = bitcast i32*\%17 to <4 x i32>*
%indvars.iv.next = or i64 %indvars.iv, 1
%arrayidx.1 = getelementptr inbounds i32, i32* %a, i64 %indvars.iv.next
                                                                                                                               store <4 x i32> %15, <4 x i32>* %18, align 4, !tbaa !34, !alias.scope !41
                                                                                                              96.88%
                                                                                                                                                                                                                                                 96.88%
%indvars.iv.tr.1 = trunc i64 %indvars.iv.next to i32
                                                                                                                               %index.next.1 = add nuw nsw i64 %index2, 16
%34 = shl i32 \%indvars.iv.tr.1.1
                                                                                                                               %vec.ind.next35.1 = add <4 x i32> %vec.ind323, <i32 16, i32 16, i32 16, i32
store i32 %34, i32* %arrayidx.1, align 4, !tbaa !34
%arrayidx2.1 = getelementptr inbounds i32, i32* %b, i64 %indvars.iv.next
                                                                                                                               %vec.ind.next39.1 = add <4 x i32> %vec.ind364, <i32 16, i32 16, i32 16, i32
%35 = add nuw nsw i32 %indvars.iv.tr.1, 10
                                                                                                                               ... 16>
store i32 %35, i32* %arrayidx2.1, align 4, !tbaa !34
                                                                                                                               %19 = getelementptr inbounds i32, i32* %a, i64 %index.next.1
%indvars.iv.next.1 = add nuw nsw i64 %indvars.iv, 2
                                                                                                                               \%20 = \text{shl} < 4 \times i32 > \%\text{vec.ind.next35.1}, < i32.1, i32.1, i32.1 > i32
%exitcond.not.1 = icmp eq i64 %indvars.iv.next.1, 1000
                                                                                                                               %21 = add < 4 \times i32 > %20, < i32 8, i32 8, i32 8, i32 8 > 
br i1 %exitcond.not.1, label %for.cond.cleanup.loopexit, label %for.body,
                                                                                                                               %22 = bitcast i32* %19 to <4 x i32>*
... !llvm.loop !46
                                                                                                                               store <4 x i32> %20, <4 x i32>* %22, align 4, !tbaa !34, !alias.scope !38,
                                                                                                                               ... !noalias !41
                                                                               F
                                                                                                                               %23 = getelementptr inbounds i32, i32* %19, i64 4
                                                                                                                               %24 = bitcast i32*\%23 to <4 x i32>*
                                                                                                                               store <4 x i32> %21, <4 x i32>* %24, align 4, !tbaa !34, !alias.scope !38,
                                                                                                                               ...!noalias!41
                                                                                                                               %25 = getelementptr inbounds i32, i32* %b, i64 %index.next.1
                                                                                                                               %26 = add <4 x i32> %vec.ind364, <i32 26, i32 26, i32 26, i32 26>
                                                                                                                               %27 = add <4 x i32> %vec.ind364, <i32 30, i32 30, i32 30, i32 30>
                                                                                                                               %28 = bitcast i32* \%25 to <4 x i32>*
                                                                                                                               store <4 x i32> %26, <4 x i32>* %28, align 4, !tbaa !34, !alias.scope !41
                                                                                                                               %29 = getelementptr inbounds i32, i32* %25, i64 4
                                                                                                                               %30 = bitcast i32* %29 to <4 x i32>*
                                                                                                                               store <4 x i32> %27, <4 x i32>* %30, align 4, !tbaa !34, !alias.scope !41
                                                                                                                               %index.next = or i64 %index.next.1, 8
                                                                                                                               %31 = icmp eq i64 %index.next, 1000
                                                                                                                               br i1 %31, label %for.cond.cleanup.loopexit10, label %vector.body.1,
                                                                                                                               ...!llvm.loop!43
                                                                      3.12%
                                                                                                                                                        3.12%
                                                                    for.cond.cleanup.loopexit:
                                                                                                                           for.cond.cleanup.loopexit10:
                                                                                                                           br label %for.cond.cleanup
                                                                    br label %for.cond.cleanup
                                                                                                 for.cond.cleanup:
                                                                                                  ret void
```

CFG for 'mvFunc' function

entry: