```
entry:
 %tobool = icmp eq i32 %is_ac, 0
 %idxprom = sext i32 %index to i64
 %arrayidx = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 17, i64 %idxprom
 %add = add nsw i32 %index, 16
 %arrayidx2 = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 16, i64 %idxprom
 %index.addr.0 = select i1 %tobool, i32 %index, i32 %add
 %htbl.0.in = select i1 %tobool, %struct.JHUFF_TBL** %arrayidx2,
... %struct.JHUFF_TBL** %arrayidx
 %htbl.0 = load %struct.JHUFF_TBL*, %struct.JHUFF_TBL** %htbl.0.in, align 8,
... !tbaa !3
 %cmp = icmp eq %struct.JHUFF_TBL* %htbl.0, null
 br i1 %cmp, label %if.then3, label %if.end8, !prof !7

if.then3:
 %err = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %0 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err, align 8,
... !tbaa !8
 %msg_code = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %0, i64 0, i32 5
 store i32 49, i32* %msg_code, align 8, !tbaa !13
 %arrayidx6 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %0, i64 0, i32 6, i32 0, i64 0
 store i32 %index.addr.0, i32* %arrayidx6, align 4, !tbaa !16
 %error_exit = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %0, i64 0, i32 0
 %1 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit, align 8, !tbaa !17
 %2 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %1(%struct.jpeg_common_struct* %2) #1
 br label %if.end8

if.end8:
 %sent_table = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 2
 %3 = load i32, i32* %sent_table, align 4, !tbaa !18
 %tobool9 = icmp eq i32 %3, 0
 br i1 %tobool9, label %if.then10, label %if.end40, !prof !20

if.then10:
 %dest1.i.i = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 5
 %4 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %next_output_byte.i.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %4, i64 0, i32 0
 %5 = load i8*, i8** %next_output_byte.i.i, align 8, !tbaa !22
 %incdec.ptr.i.i = getelementptr inbounds i8, i8* %5, i64 1
 store i8* %incdec.ptr.i.i, i8** %next_output_byte.i.i, align 8, !tbaa !22
 store i8 -1, i8* %5, align 1, !tbaa !24
 %free_in_buffer.i.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %4, i64 0, i32 1
 %6 = load i64, i64* %free_in_buffer.i.i, align 8, !tbaa !25
 %dec.i.i = add i64 %6, -1
 store i64 %dec.i.i, i64* %free_in_buffer.i.i, align 8, !tbaa !25
 %cmp.i.i = icmp eq i64 %dec.i.i, 0
 br i1 %cmp.i.i, label %if.then.i.i, label %emit_byte.exit.i, !prof !26

if.then.i.i:
 %empty_output_buffer.i.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %4, i64 0, i32 3
 %7 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i.i, align 8, !tbaa !27
 %call.i.i = tail call i32 %7(%struct.jpeg_compress_struct* nonnull %cinfo) #1
 %tobool.i.i = icmp eq i32 %call.i.i, 0
 br i1 %tobool.i.i, label %if.then3.i.i, label %emit_byte.exit.i

if.then3.i.i:
 %err.i.i = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %8 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i.i, align
... 8, !tbaa !8
 %msg_code.i.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %8, i64 0, i32 5
 store i32 22, i32* %msg_code.i.i, align 8, !tbaa !13
 %error_exit.i.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %8, i64 0, i32 0
 %9 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i.i, align 8, !tbaa !17
 %10 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %9(%struct.jpeg_common_struct* %10) #1
 br label %emit_byte.exit.i

emit_byte.exit.i:
 %11 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %next_output_byte.i3.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %11, i64 0, i32 0
 %12 = load i8*, i8** %next_output_byte.i3.i, align 8, !tbaa !22
 %incdec.ptr.i4.i = getelementptr inbounds i8, i8* %12, i64 1
 store i8* %incdec.ptr.i4.i, i8** %next_output_byte.i3.i, align 8, !tbaa !22
 store i8 -60, i8* %12, align 1, !tbaa !24
 %free_in_buffer.i5.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %11, i64 0, i32 1
 %13 = load i64, i64* %free_in_buffer.i5.i, align 8, !tbaa !25
 %dec.i6.i = add i64 %13, -1
 store i64 %dec.i6.i, i64* %free_in_buffer.i5.i, align 8, !tbaa !25
 %cmp.i7.i = icmp eq i64 %dec.i6.i, 0
 br i1 %cmp.i7.i, label %if.then.i11.i, label %for.body.preheader, !prof !26

if.then.i11.i:
 %empty_output_buffer.i8.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %11, i64 0, i32 3
 %14 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i8.i, align 8, !tbaa
... !27
 %call.i9.i = tail call i32 %14(%struct.jpeg_compress_struct* nonnull %cinfo)
... #1
 %tobool.i10.i = icmp eq i32 %call.i9.i, 0
 br i1 %tobool.i10.i, label %if.then3.i15.i, label %for.body.preheader

if.then3.i15.i:
 %err.i12.i = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %15 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i12.i,
... align 8, !tbaa !8
 %msg_code.i13.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %15, i64 0, i32 5
 store i32 22, i32* %msg_code.i13.i, align 8, !tbaa !13
 %error_exit.i14.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %15, i64 0, i32 0
 %16 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i14.i, align 8, !tbaa !17
 %17 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %16(%struct.jpeg_common_struct* %17) #1
 br label %for.body.preheader

for.body.preheader:
 %arrayidx13 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 1
 %18 = load i8, i8* %arrayidx13, align 1, !tbaa !24
 %conv = zext i8 %18 to i32
 %arrayidx13.1 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 2
 %19 = load i8, i8* %arrayidx13.1, align 1, !tbaa !24
 %conv.1 = zext i8 %19 to i32
 %add14.1 = add nuw nsw i32 %conv.1, %conv
 %arrayidx13.2 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 3
 %20 = load i8, i8* %arrayidx13.2, align 1, !tbaa !24
 %conv.2 = zext i8 %20 to i32
 %add14.2 = add nuw nsw i32 %conv.2, %add14.1
 %arrayidx13.3 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 4
 %21 = load i8, i8* %arrayidx13.3, align 1, !tbaa !24
 %conv.3 = zext i8 %21 to i32
 %add14.3 = add nuw nsw i32 %conv.3, %add14.2
 %arrayidx13.4 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 5
 %22 = load i8, i8* %arrayidx13.4, align 1, !tbaa !24
 %conv.4 = zext i8 %22 to i32
 %add14.4 = add nuw nsw i32 %conv.4, %add14.3
 %arrayidx13.5 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 6
 %23 = load i8, i8* %arrayidx13.5, align 1, !tbaa !24
 %conv.5 = zext i8 %23 to i32
 %add14.5 = add nuw nsw i32 %conv.5, %add14.4
 %arrayidx13.6 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 7
 %24 = load i8, i8* %arrayidx13.6, align 1, !tbaa !24
 %conv.6 = zext i8 %24 to i32
 %add14.6 = add nuw nsw i32 %conv.6, %add14.5
 %arrayidx13.7 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 8
 %25 = load i8, i8* %arrayidx13.7, align 1, !tbaa !24
 %conv.7 = zext i8 %25 to i32
 %add14.7 = add nsw i32 %conv.7, %add14.6
 %arrayidx13.8 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 9
 %26 = load i8, i8* %arrayidx13.8, align 1, !tbaa !24
 %conv.8 = zext i8 %26 to i32
 %add14.8 = add nsw i32 %conv.8, %add14.7
 %arrayidx13.9 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 10
 %27 = load i8, i8* %arrayidx13.9, align 1, !tbaa !24
 %conv.9 = zext i8 %27 to i32
 %add14.9 = add nsw i32 %conv.9, %add14.8
 %arrayidx13.10 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 11
 %28 = load i8, i8* %arrayidx13.10, align 1, !tbaa !24
 %conv.10 = zext i8 %28 to i32
 %add14.10 = add nsw i32 %conv.10, %add14.9
 %arrayidx13.11 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 12
 %29 = load i8, i8* %arrayidx13.11, align 1, !tbaa !24
 %conv.11 = zext i8 %29 to i32
 %add14.11 = add nsw i32 %conv.11, %add14.10
 %arrayidx13.12 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 13
 %30 = load i8, i8* %arrayidx13.12, align 1, !tbaa !24
 %conv.12 = zext i8 %30 to i32
 %add14.12 = add nsw i32 %conv.12, %add14.11
 %arrayidx13.13 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 14
 %31 = load i8, i8* %arrayidx13.13, align 1, !tbaa !24
 %conv.13 = zext i8 %31 to i32
 %add14.13 = add nsw i32 %conv.13, %add14.12
 %arrayidx13.14 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 15
 %32 = load i8, i8* %arrayidx13.14, align 1, !tbaa !24
 %conv.14 = zext i8 %32 to i32
 %add14.14 = add nsw i32 %conv.14, %add14.13
 %arrayidx13.15 = getelementptr inbounds %struct.JHUFF_TBL,
... %struct.JHUFF_TBL* %htbl.0, i64 0, i32 0, i64 16
 %33 = load i8, i8* %arrayidx13.15, align 1, !tbaa !24
 %conv.15 = zext i8 %33 to i32
 %add14.15 = add nsw i32 %conv.15, %add14.14
 %add17 = add nsw i32 %add14.15, 19
 %shr4.i = lshr i32 %add17, 8
 %34 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %conv.i.i = trunc i32 %shr4.i to i8
 %next_output_byte.i.i72 = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %34, i64 0, i32 0
 %35 = load i8*, i8** %next_output_byte.i.i72, align 8, !tbaa !22
 %incdec.ptr.i.i73 = getelementptr inbounds i8, i8* %35, i64 1
 store i8* %incdec.ptr.i.i73, i8** %next_output_byte.i.i72, align 8, !tbaa !22
 store i8 %conv.i.i, i8* %35, align 1, !tbaa !24
 %free_in_buffer.i.i74 = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %34, i64 0, i32 1
 %36 = load i64, i64* %free_in_buffer.i.i74, align 8, !tbaa !25
 %dec.i.i75 = add i64 %36, -1
 store i64 %dec.i.i75, i64* %free_in_buffer.i.i74, align 8, !tbaa !25
 %cmp.i.i76 = icmp eq i64 %dec.i.i75, 0
 br i1 %cmp.i.i76, label %if.then.i.i80, label %emit_byte.exit.i85, !prof !26

if.then.i.i80:
 %empty_output_buffer.i.i77 = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %34, i64 0, i32 3
 %37 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i.i77, align 8, !tbaa
... !27
 %call.i.i78 = tail call i32 %37(%struct.jpeg_compress_struct* nonnull
... %cinfo) #1
 %tobool.i.i79 = icmp eq i32 %call.i.i78, 0
 br i1 %tobool.i.i79, label %if.then3.i.i84, label %emit_byte.exit.i85

if.then3.i.i84:
 %err.i.i81 = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %38 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i.i81,
... align 8, !tbaa !8
 %msg_code.i.i82 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %38, i64 0, i32 5
 store i32 22, i32* %msg_code.i.i82, align 8, !tbaa !13
 %error_exit.i.i83 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %38, i64 0, i32 0
 %39 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i.i83, align 8, !tbaa !17
 %40 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %39(%struct.jpeg_common_struct* %40) #1
 br label %emit_byte.exit.i85

emit_byte.exit.i85:
 %41 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %conv.i6.i = trunc i32 %add17 to i8
 %next_output_byte.i7.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %41, i64 0, i32 0
 %42 = load i8*, i8** %next_output_byte.i7.i, align 8, !tbaa !22
 %incdec.ptr.i8.i = getelementptr inbounds i8, i8* %42, i64 1
 store i8* %incdec.ptr.i8.i, i8** %next_output_byte.i7.i, align 8, !tbaa !22
 store i8 %conv.i6.i, i8* %42, align 1, !tbaa !24
 %free_in_buffer.i9.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %41, i64 0, i32 1
 %43 = load i64, i64* %free_in_buffer.i9.i, align 8, !tbaa !25
 %dec.i10.i = add i64 %43, -1
 store i64 %dec.i10.i, i64* %free_in_buffer.i9.i, align 8, !tbaa !25
 %cmp.i11.i = icmp eq i64 %dec.i10.i, 0
 br i1 %cmp.i11.i, label %if.then.i15.i, label %emit_2bytes.exit, !prof !26

if.then.i15.i:
 %empty_output_buffer.i12.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %41, i64 0, i32 3
 %44 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i12.i, align 8, !tbaa
... !27
 %call.i13.i = tail call i32 %44(%struct.jpeg_compress_struct* nonnull
... %cinfo) #1
 %tobool.i14.i = icmp eq i32 %call.i13.i, 0
 br i1 %tobool.i14.i, label %if.then3.i19.i, label %emit_2bytes.exit

if.then3.i19.i:
 %err.i16.i = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %45 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i16.i,
... align 8, !tbaa !8
 %msg_code.i17.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %45, i64 0, i32 5
 store i32 22, i32* %msg_code.i17.i, align 8, !tbaa !13
 %error_exit.i18.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %45, i64 0, i32 0
 %46 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i18.i, align 8, !tbaa !17
 %47 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %46(%struct.jpeg_common_struct* %47) #1
 br label %emit_2bytes.exit

emit_2bytes.exit:
 %48 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %conv.i = trunc i32 %index.addr.0 to i8
 %next_output_byte.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %48, i64 0, i32 0
 %49 = load i8*, i8** %next_output_byte.i, align 8, !tbaa !22
 %incdec.ptr.i = getelementptr inbounds i8, i8* %49, i64 1
 store i8* %incdec.ptr.i, i8** %next_output_byte.i, align 8, !tbaa !22
 store i8 %conv.i, i8* %49, align 1, !tbaa !24
 %free_in_buffer.i = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %48, i64 0, i32 1
 %50 = load i64, i64* %free_in_buffer.i, align 8, !tbaa !25
 %dec.i = add i64 %50, -1
 store i64 %dec.i, i64* %free_in_buffer.i, align 8, !tbaa !25
 %cmp.i = icmp eq i64 %dec.i, 0
 br i1 %cmp.i, label %if.then.i, label %for.cond18.preheader, !prof !26

if.then.i:
 %empty_output_buffer.i = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %48, i64 0, i32 3
 %51 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i, align 8, !tbaa !27
 %call.i = tail call i32 %51(%struct.jpeg_compress_struct* nonnull %cinfo) #1
 %tobool.i = icmp eq i32 %call.i, 0
 br i1 %tobool.i, label %if.then3.i, label %for.cond18.preheader

if.then3.i:
 %err.i = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %52 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i, align
... 8, !tbaa !8
 %msg_code.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %52, i64 0, i32 5
 store i32 22, i32* %msg_code.i, align 8, !tbaa !13
 %error_exit.i = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %52, i64 0, i32 0
 %53 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i, align 8, !tbaa !17
 %54 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 tail call void %53(%struct.jpeg_common_struct* %54) #1
 br label %for.cond18.preheader

for.cond18.preheader:
 %err.i97 = getelementptr inbounds %struct.jpeg_compress_struct,
... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 0
 %55 = bitcast %struct.jpeg_compress_struct* %cinfo to
... %struct.jpeg_common_struct*
 br label %for.body21

for.body21:
 %indvars.iv123 = phi i64 [ 1, %for.cond18.preheader ], [
... %indvars.iv.next124, %emit_byte.exit101 ]
 %arrayidx24 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 0, i64 %indvars.iv123
 %56 = load i8, i8* %arrayidx24, align 1, !tbaa !24
 %57 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %next_output_byte.i88 = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %57, i64 0, i32 0
 %58 = load i8*, i8** %next_output_byte.i88, align 8, !tbaa !22
 %incdec.ptr.i89 = getelementptr inbounds i8, i8* %58, i64 1
 store i8* %incdec.ptr.i89, i8** %next_output_byte.i88, align 8, !tbaa !22
 store i8 %56, i8* %58, align 1, !tbaa !24
 %free_in_buffer.i90 = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %57, i64 0, i32 1
 %59 = load i64, i64* %free_in_buffer.i90, align 8, !tbaa !25
 %dec.i91 = add i64 %59, -1
 store i64 %dec.i91, i64* %free_in_buffer.i90, align 8, !tbaa !25
 %cmp.i92 = icmp eq i64 %dec.i91, 0
 br i1 %cmp.i92, label %if.then.i96, label %emit_byte.exit101, !prof !26

if.then.i96:
 %empty_output_buffer.i93 = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %57, i64 0, i32 3
 %60 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i93, align 8, !tbaa !27
 %call.i94 = tail call i32 %60(%struct.jpeg_compress_struct* nonnull %cinfo)
... #1
 %tobool.i95 = icmp eq i32 %call.i94, 0
 br i1 %tobool.i95, label %if.then3.i100, label %emit_byte.exit101

if.then3.i100:
 %61 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i97, align
... 8, !tbaa !8
 %msg_code.i98 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %61, i64 0, i32 5
 store i32 22, i32* %msg_code.i98, align 8, !tbaa !13
 %error_exit.i99 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %61, i64 0, i32 0
 %62 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i99, align 8, !tbaa !17
 tail call void %62(%struct.jpeg_common_struct* nonnull %55) #1
 br label %emit_byte.exit101

emit_byte.exit101:
 %indvars.iv.next124 = add nuw nsw i64 %indvars.iv123, 1
 %exitcond125 = icmp eq i64 %indvars.iv.next124, 17
 br i1 %exitcond125, label %for.cond29.preheader, label %for.body21, !prof !29

for.cond29.preheader:
 %cmp30118 = icmp sgt i32 %add14.15, 0
 br i1 %cmp30118, label %for.body32.preheader, label %for.end38, !prof !28

for.body32.preheader:
 br label %for.body32

for.body32:
 %indvars.iv = phi i64 [ %indvars.iv.next, %emit_byte.exit117 ], [ 0,
... %for.body32.preheader ]
 %arrayidx34 = getelementptr inbounds %struct.JHUFF_TBL, %struct.JHUFF_TBL*
... %htbl.0, i64 0, i32 1, i64 %indvars.iv
 %63 = load i8, i8* %arrayidx34, align 1, !tbaa !24
 %64 = load %struct.jpeg_destination_mgr*, %struct.jpeg_destination_mgr**
... %dest1.i.i, align 8, !tbaa !21
 %next_output_byte.i104 = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %64, i64 0, i32 0
 %65 = load i8*, i8** %next_output_byte.i104, align 8, !tbaa !22
 %incdec.ptr.i105 = getelementptr inbounds i8, i8* %65, i64 1
 store i8* %incdec.ptr.i105, i8** %next_output_byte.i104, align 8, !tbaa !22
 store i8 %63, i8* %65, align 1, !tbaa !24
 %free_in_buffer.i106 = getelementptr inbounds %struct.jpeg_destination_mgr,
... %struct.jpeg_destination_mgr* %64, i64 0, i32 1
 %66 = load i64, i64* %free_in_buffer.i106, align 8, !tbaa !25
 %dec.i107 = add i64 %66, -1
 store i64 %dec.i107, i64* %free_in_buffer.i106, align 8, !tbaa !25
 %cmp.i108 = icmp eq i64 %dec.i107, 0
 br i1 %cmp.i108, label %if.then.i112, label %emit_byte.exit117, !prof !26

if.then.i112:
 %empty_output_buffer.i109 = getelementptr inbounds
... %struct.jpeg_destination_mgr, %struct.jpeg_destination_mgr* %64, i64 0, i32 3
 %67 = load i32 (%struct.jpeg_compress_struct*)*, i32
... (%struct.jpeg_compress_struct*)** %empty_output_buffer.i109, align 8, !tbaa
... !27
 %call.i110 = tail call i32 %67(%struct.jpeg_compress_struct* nonnull %cinfo)
... #1
 %tobool.i111 = icmp eq i32 %call.i110, 0
 br i1 %tobool.i111, label %if.then3.i116, label %emit_byte.exit117

if.then3.i116:
 %68 = load %struct.jpeg_error_mgr*, %struct.jpeg_error_mgr** %err.i97, align
... 8, !tbaa !8
 %msg_code.i114 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %68, i64 0, i32 5
 store i32 22, i32* %msg_code.i114, align 8, !tbaa !13
 %error_exit.i115 = getelementptr inbounds %struct.jpeg_error_mgr,
... %struct.jpeg_error_mgr* %68, i64 0, i32 0
 %69 = load void (%struct.jpeg_common_struct*)*, void
... (%struct.jpeg_common_struct*)** %error_exit.i115, align 8, !tbaa !17
 tail call void %69(%struct.jpeg_common_struct* nonnull %55) #1
 br label %emit_byte.exit117

emit_byte.exit117:
 %indvars.iv.next = add nuw nsw i64 %indvars.iv, 1
 %lftr.wideiv = trunc i64 %indvars.iv.next to i32
 %exitcond = icmp eq i32 %lftr.wideiv, %add14.15
 br i1 %exitcond, label %for.end38.loopexit, label %for.body32, !prof !30

for.end38.loopexit:
 br label %for.end38

for.end38:
 store i32 1, i32* %sent_table, align 4, !tbaa !18
 br label %if.end40

if.end40:
 ret void
```

CFG for 'emit_dht' function