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entry:
%retval = alloca i32, align 4
%A = alloca [10 x i32], align 16
%B = alloca [10 x i32], align 16
%i = alloca i32, align 4
%j = alloca i32, align 4
store i32 0, i32* %retval, align 4
%0 = bitcast [10 x i32]* %A to i8*
call void @llvm.memcpy.p0i8.p0i8.i64(i8* align 16 %0, i8* align 16 bitcast
... ([10 x i32]* @ _const.main.A to i8*), i64 40, i1 false)
%1 = bitcast [10 x i32]* %B to i8*
call void @llvm.memset.p0i8.i64(i8* align 16 %1, i8 0, i64 40, i1 false)
store i32 0, i32* %j, align 4
store i32 0, i32* %i, align 4
br label %for.cond
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for.cond:
%2 = load i32, i32* %i, align 4
%cmp = icmp slt i32 %2, 1000
br i1 %cmp, label %for.body, label %for.end, !prof !34
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for.body:
%3 = load i32, i32* %j, align 4
%idxprom = sext i32 %3 to i64
%arrayidx = getelementptr inbounds [10 x i32], [10 x i32]* %A, i64 0, i64
... %idxprom
%4 = load i32, i32* %arrayidx, align 4
%mul = mul nsw i32 %4, 13
%add = add nsw i32 %mul, 4
%5 = load i32, i32* %i, align 4
%add1 = add nsw i32 %add, %5
%6 = load i32, i32* %i, align 4
%rem = srem i32 %6, 10
%idxprom2 = sext i32 %rem to i64
%arrayidx3 = getelementptr inbounds [10 x i32], [10 x i32]* %B, i64 0, i64
... %idxprom2
store i32 %add1, i32* %arrayidx3, align 4
%7 = load i32, i32* %i, align 4
%rem4 = srem i32 %7, 8
%cmp5 = icmp eq i32 %rem4, 0
br i1 %cmp5, label %if.then, label %if.end, !prof !35
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for.end:
ret i32 0
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if.then:
%8 = load i32, i32* %i, align 4
store i32 %8, i32* %j, align 4
br label %if.end
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if.end:
%9 = load i32, i32* %i, align 4
%rem6 = srem i32 %9, 10
%idxprom7 = sext i32 %rem6 to i64
%arrayidx8 = getelementptr inbounds [10 x i32], [10 x i32]* %B, i64 0, i64
... %idxprom7
%10 = load i32, i32* %arrayidx8, align 4
%call = call i32 (i8*, ...) @printf(i8* noundef getelementptr inbounds ([4 x
... i8], [4 x i8]* @.str, i64 0, i64 0), i32 noundef %10)
br label %for.inc
```

```
for.inc:
%11 = load i32, i32* %i, align 4
%inc = add nsw i32 %11, 1
store i32 %inc, i32* %i, align 4
br label %for.cond, !llvm.loop !36
```

CFG for 'main' function