```
entry:
                                             %retval = alloca i32, align 4
                                             %A = alloca [10 \times 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 = \text{bitcast} [10 \times i32] * \% A \text{ 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
                                                        for.cond:
                                                        %2 = load i32, i32* %i, align 4
                                                        %cmp = icmp slt i32 %2, 10
                                                        br i1 %cmp, label %for.body, label %for.end, !prof!34
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, 23
\%5 = \text{load i}32. i32* \%i. align 4
%add = add nsw i32 %mul. %5
                                                                                               for.end:
\%6 = \text{load i}32, i32*\%i, align 4
                                                                                                ret i32 0
%idxprom1 = sext i32 \%6 to i64
% \operatorname{arrayidx2} = \operatorname{getelementptr} \operatorname{inbounds} [10 \times i32], [10 \times i32] * \%B, i64 0, i64
... %idxprom1
store i32 %add, i32* %arrayidx2, align 4
%7 = load i32, i32* %i, align 4
%rem = srem i32 \%7, 8
%cmp3 = icmp eq i32 %rem, 0
br i1 %cmp3, label %if.then, label %if.else, !prof!35
                                                             F
                                           if.else:
   if.then:
                                            \%9 = \text{load i} 32, i 32*\%i, align 4
   \%8 = \text{load i}32, i32*\%i, align 4
                                            %add4 = add nsw i32 \%9, 1
   store i32 %8, i32* %j, align 4
                                            store i32 %add4, i32* %j, align 4
   br label %if.end
                                            br label %if.end
if.end:
%10 = load i32, i32* \%i, align 4
%idxprom5 = sext i32 %10 to i64
% = \text{getelementptr inbounds} [10 \times i32], [10 \times i32] * \%B, i64 0, i64
... %idxprom5
%11 = load i32, i32* %arrayidx6, align 4
%call = call i32 (i8*, ...) @printf(i8* noundef getelementptr inbounds ([4 x
... i8], [4 x i8]* @.str, i64 0, i64 0), i32 noundef %11)
br label %for.inc
                                              for.inc:
                                              %12 = load i32, i32* %i, align 4
                                              %inc = add nsw i32 %12, 1
                                              store i32 %inc, i32* %i, align 4
                                              br label %for.cond, !llvm.loop !36
```

CFG for 'main' function