```
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 = \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
                                             \%2 = \text{load i} 32, i 32* \% j, align 4
                                             %var = alloca i32, align 16
                                             store i32 %2, i32* %var, align 4
                                             br label %for.cond
                                                       for.cond:
                                                        %3 = load i32, i32* %i, align 4
                                                        %cmp = icmp slt i32 %3, 10
                                                        br i1 %cmp, label %for.body, label %for.end, !prof !34
                                                                                                   F
for.body:
%fix = load i32, i32* %var, align 4
%idxprom = sext i32 %fix 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 = \text{load i}32, i32*\%i, align 4
%add1 = add nsw i32 %add, %5
                                                                                               for.end:
\%6 = \text{load i}32, i32*\%i, align 4
                                                                                               ret i32 0
%idxprom2 = sext i32 %6 to i64
% \operatorname{arrayidx} 3 = \operatorname{getelementptr} in bounds [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
%rem = srem i32 \%7, 8
%cmp4 = icmp eq i32 %rem, 0
br i1 %cmp4, label %if.then, label %if.end, !prof!35
                  Τ
                                                             F
       if.then:
       %8 = load i32, i32* %i, align 4
       store i32 %8, i32* %var, align 4
       br label %if.end
if.end:
%9 = load i32, i32* %i, align 4
%idxprom5 = sext i32 %9 to i64
% \operatorname{arrayidx} 6 = \operatorname{getelementptr} in bounds [10 x i32], [10 x i32] * %B, i64 0, i64
... %idxprom5
%10 = 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 %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