

```
entry:
  %retval = alloca i32, align 4
  %argc.addr = alloca i32, align 4
  %argv.addr = alloca i8**, align 8
  %a = alloca i32, align 4
  %sum = alloca i32, align 4
  %i = alloca i32, align 4
  %c = alloca i32, align 4
  store i32 0, i32* %retval, align 4
  store i32 %argc, i32* %argc.addr, align 4
  store i8** %argv, i8*** %argv.addr, align 8
  store i32 0, i32* %a, align 4
  store i32 0, i32* %sum, align 4
  store i32 0, i32* %i, align 4
  br label %for.cond
```

```
for.cond:
  %0 = load i32, i32* %i, align 4
  %1 = load i32, i32* %argc.addr, align 4
  %cmp = icmp slt i32 %0, %1
  br i1 %cmp, label %for.body, label %for.end
```

```
for.body:
  %2 = load i32, i32* %i, align 4
  %3 = load i32, i32* %sum, align 4
  %add = add nsw i32 %3, %2
  store i32 %add, i32* %sum, align 4
  br label %for.inc
```

```
for.end:
  %5 = load i32, i32* %a, align 4
  %6 = load i32, i32* %sum, align 4
  %call = call i32 @foo(i32 %5, i32 %6)
  store i32 %call, i32* %c, align 4
  %7 = load i32, i32* %c, align 4
  %call1 = call i32 (i8*, ...) @printf(i8* getelementptr inbounds ([5 x i8],
... [5 x i8]* @.str, i32 0, i32 0), i32 %7)
  ret i32 0
```

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

Dominator tree for 'main' function