```
entry:
%call.i = tail call i32 @rand() #7
 %rem.i = srem i32 %call.i, 5
 %call.i7 = tail call i32 @rand() #7
 %rem.i8 = srem i32 %call.i7, 5
 %new_alloca_1 = alloca i32, align 4
 %new_alloca_2 = alloca i32, align 4
 %new_add = add i32 %rem.i8, 232
 %new_mul = mul i32 %rem.i8, 232
 %equals_compare = icmp eq i32 %new_add, %new_mul
 %mul_1 = mul i32 456, 534
 %new_add_use = add i32 %mul_1, 534
 br i1 %equals_compare, label %0, label %1
                    T          |          F
```

```
0:
store i32 %new_add, ptr %new_alloca_1, align 4
 br label %2
```

```
1:
store i32 %new_mul, ptr %new_alloca_2, align 4
 br label %2
```

```
2:
%call3 = tail call noundef nonnull align 8 dereferenceable(8) ptr
... @_ZNSolsEi(ptr noundef nonnull align 8 dereferenceable(8) @_ZSt4cout, i32
... noundef %mul_1)
 %vtable.i = load ptr, ptr %call3, align 8, !tbaa !5
 %vbase.offset.ptr.i = getelementptr i8, ptr %vtable.i, i64 -24
 %vbase.offset.i = load i64, ptr %vbase.offset.ptr.i, align 8
 %add.ptr.i = getelementptr inbounds i8, ptr %call3, i64 %vbase.offset.i
 %_M_ctype.i.i = getelementptr inbounds i8, ptr %add.ptr.i, i64 240
 %3 = load ptr, ptr %_M_ctype.i.i, align 8, !tbaa !8
 %tobool.not.i.i.i = icmp eq ptr %3, null
 br i1 %tobool.not.i.i.i, label %if.then.i.i.i, label
... %_ZSt13__check_facetISt5ctypeIcEERKT_PS3_.exit.i.i
                    T          |          F
```

```
if.then.i.i.i:
tail call void @_ZSt16__throw_bad_castv() #8
 unreachable
```

```
_ZSt13__check_facetISt5ctypeIcEERKT_PS3_.exit.i.i:
%_M_widen_ok.i.i.i = getelementptr inbounds i8, ptr %3, i64 56
 %4 = load i8, ptr %_M_widen_ok.i.i.i, align 8, !tbaa !20
 %tobool.not.i3.i.i = icmp eq i8 %4, 0
 br i1 %tobool.not.i3.i.i, label %if.end.i.i.i, label %if.then.i4.i.i
                    T          |          F
```

```
if.end.i.i.i:
tail call void @_ZNKSt5ctypeIcE13_M_widen_initEv(ptr noundef nonnull align
... 8 dereferenceable(570) %3)
 %vtable.i.i.i = load ptr, ptr %3, align 8, !tbaa !5
 %vfn.i.i.i = getelementptr inbounds i8, ptr %vtable.i.i.i, i64 48
 %6 = load ptr, ptr %vfn.i.i.i, align 8
 %call.i.i.i = tail call noundef signext i8 %6(ptr noundef nonnull align 8
... dereferenceable(570) %3, i8 noundef signext 10)
 br label %_ZSt4endlIcSt11char_traitsIcEERSt13basic_ostreamIT_T0_ES6_.exit
```

```
if.then.i4.i.i:
%arrayidx.i.i.i = getelementptr inbounds i8, ptr %3, i64 67
 %5 = load i8, ptr %arrayidx.i.i.i, align 1, !tbaa !23
 br label %_ZSt4endlIcSt11char_traitsIcEERSt13basic_ostreamIT_T0_ES6_.exit
```

```
_ZSt4endlIcSt11char_traitsIcEERSt13basic_ostreamIT_T0_ES6_.exit:
%retval.0.i.i.i = phi i8 [ %5, %if.then.i4.i.i ], [ %call.i.i.i,
... %if.end.i.i.i ]
 %call1.i = tail call noundef nonnull align 8 dereferenceable(8) ptr
... @_ZNSo3putEc(ptr noundef nonnull align 8 dereferenceable(8) %call3, i8
... noundef signext %retval.0.i.i.i)
 %call.i.i = tail call noundef nonnull align 8 dereferenceable(8) ptr
... @_ZNSo5flushEv(ptr noundef nonnull align 8 dereferenceable(8) %call1.i)
 ret i32 0
```

CFG for 'main' function