```
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
 %add = add nsw i32 %rem.i8, %rem.i
 %call3 = tail call noundef nonnull align 8 dereferenceable(8) ptr
... @_ZNSolsEi(ptr noundef nonnull align 8 dereferenceable(8) @_ZSt4cout, i32
... noundef %add)
 %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
 %i = load ptr, ptr %_M_ctype.i.i, align 8, !tbaa !8
 %tobool.not.i.i.i = icmp eq ptr %i, 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 %i, i64 56
 %i1 = load i8, ptr %_M_widen_ok.i.i.i, align 8, !tbaa !20
 %tobool.not.i3.i.i = icmp eq i8 %i1, 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) %i)
 %vtable.i.i.i = load ptr, ptr %i, align 8, !tbaa !5
 %vfn.i.i.i = getelementptr inbounds i8, ptr %vtable.i.i.i, i64 48
 %i3 = load ptr, ptr %vfn.i.i.i, align 8
 %call.i.i.i = tail call noundef signext i8 %i3(ptr noundef nonnull align 8
... dereferenceable(570) %i, 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 %i, i64 67
 %i2 = 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 [ %i2, %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