```
%7:
                                                                     %8 = shl i64 %4, 8
                                                                      %sub.i = add nsw i32 %2, -1
                                                                      br label %pregion for entry.entry.i
                                                        pregion for entry.entry.i:
                                                         %_local_id_x.0 = phi i64 [ 0, %7 ], [ %18, %if.end.r_exit.i.1 ]
                                                         \%\overline{9} = \overline{add} nuw nsw i64 % local id x.0, %8
                                                         %conv.i = trunc i64 %9 to i32
                                                         %cmp.i = icmp sgt i32 %conv.i, 0
                                                         %cmp2.i = icmp sgt i32 %sub.i, %conv.i
                                                         %or.cond.i = and i1 %cmp.i, %cmp2.i
                                                         br i1 %or.cond.i, label %if.then.i, label %if.end.r exit.i
                                                                      Τ
                if.then.i:
                 %sub4.i = shl i64 %9, 32
                 %sext.i = add i64 %sub4.i, -4294967296
                 %idxprom.i = ashr exact i64 %sext.i, 32
                 %arrayidx.i = getelementptr inbounds float, float* %0, i64 %idxprom.i
                 %10 = load float, float* %arrayidx.i, align 4, !tbaa !12
                 %idxprom5.i = ashr exact i64 %sub4.i, 32
                 %arravidx6.i = getelementptr inbounds float, float* %0, i64 %idxprom5.i
                 %11 = load float, float* %arrayidx6.i, align 4, !tbaa !12
                 %add.i = fadd float %10, %11
                 %sext22.i = ashr exact i64 %sub4.i, 32
                 %idxprom8.i = or i64 %sext22.i, 1
                 %arrayidx9.i = getelementptr inbounds float, float* %0, i64 %idxprom8.i
                 %12 = load float, float* %arrayidx9.i, align 4, !tbaa !12
                 %add10.i = fadd float %add.i, %12
                 %mul.i = fmul float %add10.i, 0x3FD5554760000000
                 %arrayidx12.i = getelementptr inbounds float, float* %1, i64 %idxprom5.i
                 store float %mul.i, float* %arrayidx12.i, align 4, !tbaa !12,
                ...!llvm.access.group!16
                 br label %if.end.r exit.i
                             if.end.r exit.i:
                              %13 = \text{ or } i64 \% \text{ local id } x.0, 1
                              %14 = add nuw nsw i64 %13, %8
                              %conv.i.1 = trunc i64 %14 to i32
                              %cmp.i.1 = icmp sgt i32 %conv.i.1, 0
                              %cmp2.i.1 = icmp sgt i32 %sub.i, %conv.i.1
                              %or.cond.i.1 = and i1 %cmp.i.1, %cmp2.i.1
                              br i1 %or.cond.i.1, label %if.then.i.1, label %if.end.r exit.i.1
                                           Τ
                                                                          F
%sub4.i.1 = shl i64 %14, 32
%sext.i.1 = add nsw i64 %sub4.i.1, -4294967296
%idxprom.i.1 = ashr exact i64 %sext.i.1, 32
%arrayidx.i.1 = getelementptr inbounds float, float* %0, i64 %idxprom.i.1
%15 = load float, float* %arrayidx.i.1, align 4, !tbaa !12
%idxprom5.i.1 = ashr exact i64 %sub4.i.1, 32
%arrayidx6.i.1 = getelementptr inbounds float, float* %0, i64 %idxprom5.i.1
%16 = load float, float* %arrayidx6.i.1, align 4, !tbaa !12
%add.i.1 = fadd float %15, %16
%sext22.i.1 = add i64 %sub4.i.1, 4294967296
%idxprom8.i.1 = ashr exact i64 %sext22.i.1, 32
%arrayidx9.i.1 = getelementptr inbounds float, float* %0, i64 %idxprom8.i.1
%17 = load float, float* %arrayidx9.i.1, align 4, !tbaa !12
%add10.i.1 = fadd float %add.i.1, %17
%mul.i.1 = fmul float %add10.i.1, 0x3FD5554760000000
%arrayidx12.i.1 = getelementptr inbounds float, float* %1, i64 %idxprom5.i.1
store float %mul.i.1, float* %arrayidx12.i.1, align 4, !tbaa !12,
...!llvm.access.group!16
br label %if.end.r exit.i.1
                                                     if.end.r exit.i.1:
                                                     %18 = add nuw nsw i64 \% local id x.0, 2
                                                     \%exitcond.1 = icmp eq i64\%18, 256
                                                     br i1 %exitcond.1, label %runJacobi1D kernel1.exit, label
                                                     ... %pregion for entry.entry.i, !llvm.loop !18
                                                                  Т
                                                                                                 F
                                                     runJacobi1D kernel1.exit:
                                                      ret void
```

if.then.i.1:

CFG for 'pocl kernel runJacobi1D kernel1' function