```
 //static int k=16;
   static int dj = nx_g+4;
   static int dk = dj *(ny_g+ 4);
   static int dkxnzby2 =(nz_g/2)* dk;
   static double x, y;
   double norma2;
   glClearColor(0.0,0.0,0.0,0.0);
   glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT);

   glDisable(GL_LIGHTING);
   glBegin(GL_LINES);
   for(int i=1 ; i<nx_g+2 ; i++)
      {
         x = i*(2.0/(nx_g+3))-1.0;
         for (int j=1 ; j<ny_g+2 ; j++ )
         {
            int index = i + j*dj + dkxnzby2;
            if(flag_g[index] >= FLUID)
            {
               y = j*(2.0/(ny_g+3))-1.0;
               glColor3f(0.0, 0.0, 1.0);
               glVertex2f ( x, y);
               glColor3f(1.0, 0.0, 0.0);
               glVertex2f ( x + gridUVW_g[0][index], y + gridUVW_g[1][index]);
             }
            }
          }
        }
        glEnd ();
}

static void draw_velocity2 ()
{
   static double x, y;
   static int dj = nx_g +4;
   static int dk = dj *(ny_g + 4);
   static int dkxnzby2 =(nz_g/2)* dk;
   double norma2;
   glClearColor(0.0,0.0,0.0,0.0);
   glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT);
   //int k=64;
   glDisable(GL_LIGHTING);
        glBegin(GL_LINES);
        for(int i=1 ; i<nx_g+2 ; i++)
        {
            x = i*(2.0/(nx_g+3))-1.0;
            for (int j=1 ; j<ny_g+2 ; j++ )
           {
               int index = i+j*dj+dkxnzby2;
               if(flag_g[index] >= FLUID){
               y = j*(2.0/(ny_g+3))-1.0;
               glColor3f(0.0, 0.0, 1.0);
               glVertex2f ( x, y);
               glColor3f(1.0, 0.0, 0.0);
               glVertex2f ( x + gridCellUVW_g[0][index], y + gridCellUVW_g[1][index]);
             }
             }
        }
        glEnd ();
}
```