The Cluster Visualize Function

```python
def visualize(self, i):
    ”””
    Shows a snapshot of the current state of the system at time t_i.  Particles are scaled by size.
    ”””
    fig = plt.figure()
    ax = fig.add_subplot(111, projection=’3d’)
    ax.set_xlim3d([-50, 50])
    ax.set_ylim3d([-50, 50])
    ax.set_zlim3d([-50, 50])
    ax.view_init(elev=11, azim=360*float(i)/self.n_steps)
    # scatter plots each body
    for body in self.cb_list:
        ax.scatter(body.r[i,0], body.r[i,1], body.r[i,2], s=body.radius, c=body.radius**4/70**4, cmap=’autumn’)
    plt.axis(’off’)
    plt.savefig(’tmp_%04d.png’ % i)
    plt.close()
```

Listing 1: Cluster.py

Does it do C++?

```cpp
void main(int argc, char* argv[]) {
    std::cout << ”This is a test” << std::endl;
    return 0;
}
```

Listing 2: Testing.cpp

Run-time	Performance	Results
11s	93%	6/10
4s	76%	8/10
6s	82%	8/10
7s	78%	10/10

Table 1: A test-table