

```

__global__ void accel_on_one_body()
{
    int i = threadIdx.x + blockDim.x * blockIdx.x;
    int j;
    float3 acc(0.0f, 0.0f, 0.0f);

    for (j = 0; j < N; j++) {
        acc = body_body_interaction(acc, body[i], body[j]);
    }
    accel[i] = acc;
}

```

**FIGURE C.8.13** CUDA thread code to compute the total force on a single body.