

```
function u_g = gravity_comp(q)

q1 = q(1); q2 = q(2); q3 = q(3);

% snippet from provided script
m1 = 5;      m2 = 5;      m3 = 5;
lc1 = 0.5/2; lc2 = -0.5/2; lc3 = 0.5/2;
gy = 9.81;
G = [(m3 * cos(q1 + q3) * lc3 + sin(q1) * q2 * m2 + sin(q1) * q2 * m3 + sin(q1) * lc1 *
m1 - sin(q1) * m2 * lc2) * gy; -(m2 + m3) * cos(q1) * gy; m3 * cos(q1 + q3) * lc3 * gy];
% snippet end

u_g = G;
```