

```
function [x,y,z] = fcn(j1,j2,d3,j4,j5,j6)
%#codegen

d1=336.55;
a2=434.46;
d4=45.86;
a5=120.51;
d6=67.08;
a6=39.52;

s1=sind(j1);
c1=cosd(j1);
s2=sind(j2);
c2=cosd(j2);
s4=sind(j4);
c4=cosd(j4);
s5=sind(j5);
c5=cosd(j5);
s6=sind(j6);
c6=cosd(j6);

x = -a6*c6*((c1*s2*c5)+s5*((s1*c4)-(c1*c2*s4)))+a6*s6*((s1*s4)+(c1*c2*c4))-d6*((c1*s2*s5)
-c5*((s1*c4)-(c1*c2*s4)))-(a5*c1*s2*c5)-a5*s5*((s1*c4)-(c1*c2*s4))-(d4*c1*s2)+((a2+d3)
*c1*c2);
y = -a6*c6*((s1*s2*c5)-s5*((c1*c4)+(s1*c2*s4)))-a6*s6*((c1*s4)-(s1*c2*c4))-d6*((s1*s2*s5)
+c5*((c1*c4)+(s1*c2*s4)))-(a5*s1*s2*c5)+a5*s5*((c1*c4)+(s1*c2*s4))-(d4*s1*s2)+((a2+d3)
*s1*c2);
z = -a6*c6*((c2*c5)+(s2*s4*s5))-(a6*s2*c4*s6)-d6*((c2*s5)-(s2*s4*c5))-(a5*c2*c5)
(a5*s2*s4*s5)-(d4*c2)-((a2+d3)*s2)+d1;
```