So luong he truc toa do: 5

n =

     5

He truc so Chuyen vi cua he truc, 0/1 (0:Tinh tien, 1:Quay)0

C =

     0   1   0   1   0   1   0   0

Dich chuyen theo truc x : 0

dx =

     0

Dich chuyen theo truc y : 0

dy =

     0

Dich chuyen theo truc z : l1

dz =

l1

T =

[1, 0, 0, 0]
[0, 1, 0, 0]
[0, 0, 1, l1]
[0, 0, 0, 1]

He truc so Chuyen vi cua he truc, 0/1 (0:Tinh tien, 1:Quay)1

C =

     0   1   0   1   0   1   0   0

Quay quanh tuc nao x/y/z: z

Q =

z

Gia tri quay quanh truc: t1

t =

t1

T =

[cos(t1), -sin(t1), 0, 0]
[sin(t1), cos(t1), 0, 0]
[0,   0, 1, l1]
[0,   0, 0, 1]

He truc so Chuyen vi cua he truc, 0/1 (0:Tinh tien, 1:Quay)0

C =

    0   1   0   1   0   1   0   0

Dich chuyen theo truc x : l2

dx =

l2

Dich chuyen theo truc y : 0

dy =

    0

Dich chuyen theo truc z : -l3

dz =

-l3

T =

[cos(t1), -sin(t1), 0, l2*cos(t1)]
[sin(t1), cos(t1), 0, l2*sin(t1)]
[0,   0, 1,   l1 - l3]
[0,   0, 0,   1]

He truc so Chuyen vi cua he truc, 0/1 (0:Tinh tien, 1:Quay)1

C =

     0   1   0   1   0   1   0   0

Quay quanh tuc nao x/y/z: z

Q =

z

Gia tri quay quanh truc: t2

t =

t2

T =

[cos(t1)*cos(t2) - sin(t1)*sin(t2), - cos(t1)*sin(t2) - cos(t2)*sin(t1), 0, l2*cos
(t1)]
[cos(t1)*sin(t2) + cos(t2)*sin(t1),   cos(t1)*cos(t2) - sin(t1)*sin(t2), 0, l2*sin
(t1)]
[0,   0, 1,   l1
l3]
[0,   0, 0,
1]

He truc so Chuyen vi cua he truc, 0/1 (0:Tinh tien, 1:Quay)0

C =

     0   1   0   1   0   1   0   0

Dich chuyen theo truc x : l4

dx =

l4

Dich chuyen theo truc y : 0

dy =

     0

Dich chuyen theo truc z : l5

dz =

```
l5


T =

[ cos(t1)*cos(t2) - sin(t1)*sin(t2), - cos(t1)*sin(t2) - cos(t2)*sin(t1), 0, l4*(cos
(t1)*cos(t2) - sin(t1)*sin(t2)) + l2*cos(t1)]
[ cos(t1)*sin(t2) + cos(t2)*sin(t1),   cos(t1)*cos(t2) - sin(t1)*sin(t2), 0, l4*(cos
(t1)*sin(t2) + cos(t2)*sin(t1)) + l2*sin(t1)]
[                                 0,                                   0, 1,
l1 - l3 + l5]
[                                 0,                                   0, 0,
1]


ans =

[ cos(t1 + t2), -sin(t1 + t2), 0, l4*cos(t1 + t2) + l2*cos(t1)]
[ sin(t1 + t2),  cos(t1 + t2), 0, l4*sin(t1 + t2) + l2*sin(t1)]
[            0,             0, 1,                 l1 - l3 + l5]
[            0,             0, 0,                            1]

>>
```