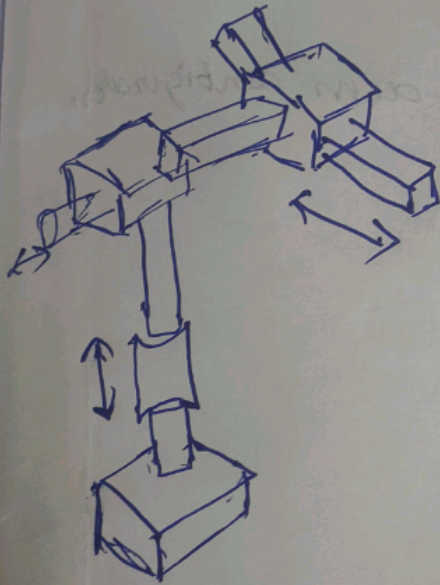
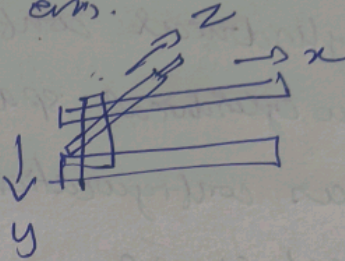


Robot classification.

Cartesian config, cylindrical config, Polar config, joint arm config.

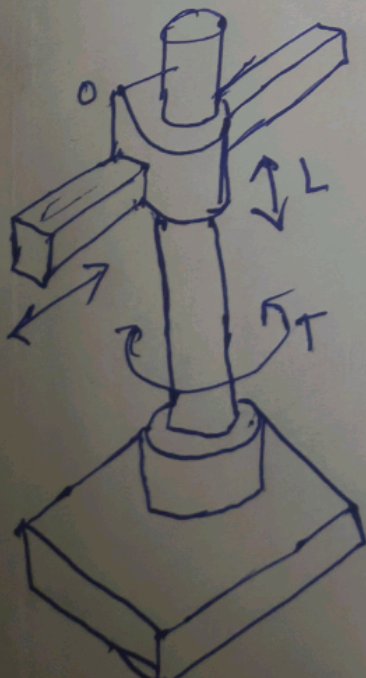
Cartesian x-y-z arm.



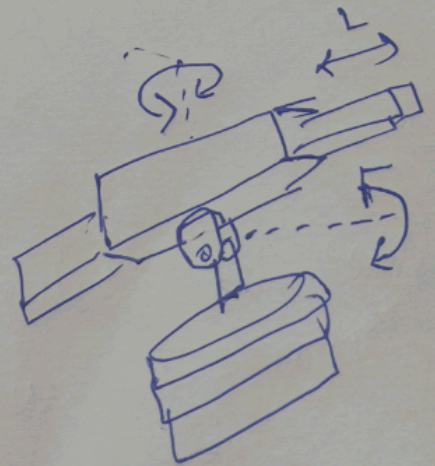
adv  
ability to do  
straight line motion

disadv  
requires large  
operating volume.

Cylindrical configuration:-



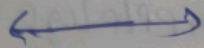
Polar configuration



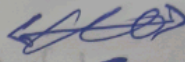


Prismatic L

Revolute R



Linear movement



Rotation.

Linear joint - is Type L joint  $\Rightarrow$  Parallel to each other

Orthogonal joint - Type O joint  $\Rightarrow \perp$  to each other

Rotational joint - Type R joint  $\perp$  to joining line

Twisting joint - Type T joint  $\parallel$  to both adjacent line

Revolving joint - Type V joint.



## Robot Reach

→ For a cartesian configuration the reach is a rectangle-type space.

→ For a cylindrical configuration the reach is a hollow cylindrical space

→ For a polar configuration the reach is part of a hollow spherical shape

→ Robot reach for a jointed-arm configuration does not have a specific shape

