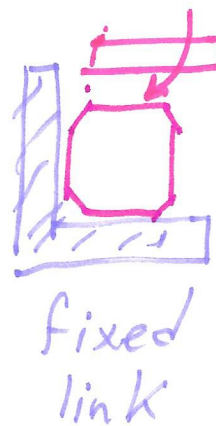
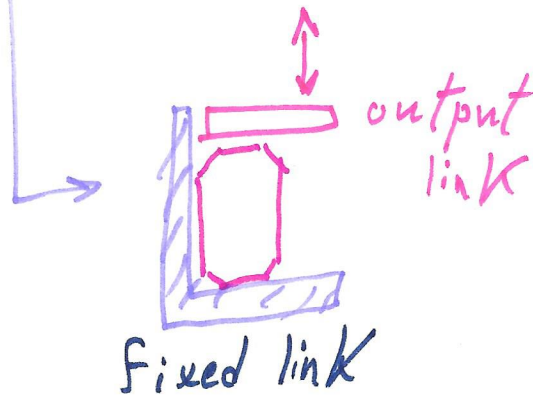


Project #1

Design a ^{household} soda can crusher
that is a quick-return mechanism

~~Even~~ Odd-numbered groups: translational output

Even - // // : rotational output



Design constraints:

- It should fit under Kitchen sink
- width & depth should not exceed double the size of the can
- It should be operated by 50% of female population

Human factors handbook

- * - Design similar to what we have done in chapter 3
 - * - decide: stroke
time ratios
 - * - design accordingly $\rightarrow$ Kinematic
 - Use software tool for dynamics
 - * - Identify can crushing force
 - $\rightarrow$ set experiment to determine this force (repeat 5 times)
 - $\downarrow$ average & std. deviation)
 - In simulation, replace the can by a spring
 - objective is to assess human force needed to crush the can
- Stage 1: due 2/26