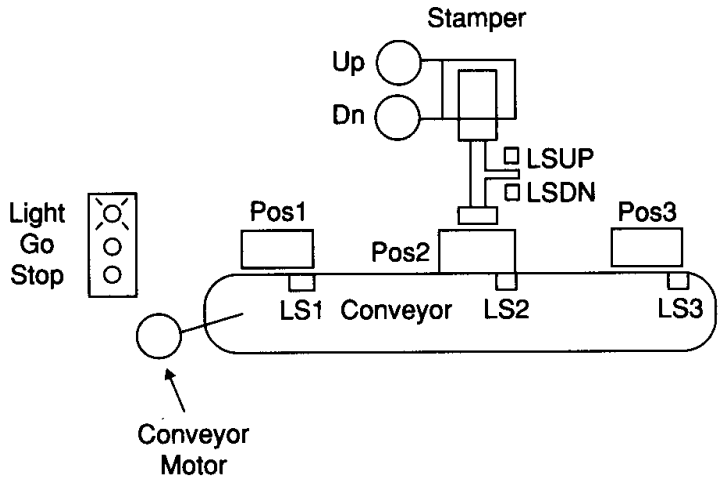
HW# 4:

Design a PLC program to operate the following process.

When a part is placed on the conveyor at position 1, it automatically moves to position 2. Upon reaching position 2, it stops and is stamped. After stamping, it automatically moves to position 3. It stops at position 3, where the part is removed manually from the conveyor. Assume that only one part is on the conveyor at a time. Add limit switches, interlocks, pushbuttons, and other devices required. If you end stuck at the middle station, you may add a manual restart switch for this point on the conveyor.



Inputs:

Position 1 (part in place)	LS1 =	I0.1
Position 2 (stamp location)	LS2 =	I0.2
Position 3 (pick up loc.)	LS3 =	I0.3
Stamp Up	LSU =	I0.4
Stamp Down	LSD =	I0.5
Go Button (start)	=	I0.6
Stop Button	=	I0.7

Outputs:

System Lite	=	Q4.0
Conveyor Starter	=	Q4.1
Stamper Up	=	Q4.2
Stamper Down	=	Q4.3