

Start

Input power to robot

Input walk that correctly uses walk technique of alternating legs

Input robot body rotation 360° so robot can face any direction allowing to walk any direction

Input standing from a seating position as well as sitting from a standing position

Process stand up

Process robot to rotate towards direction needed to walk to chair

Process walking the distance required for the robot to be centered with chair to sit

Process rotate robot back to position needed for correct sitting position

Decision if robot can sit

Output robot sit

Output robot power off

Else reposition robot to correct position to fulfill task

Recheck Decision

Output robot sit

Output robot power off

Stop