Robot should move along a path like this

Current robot position, orientation

Next subgoal position

Robot should take path that minimizes turning angle

Robot should NOT move along a path like this
(x_c, y_c, \theta_c) = current robot position, orientation
(x_G, y_G) = goal position
\theta_d = angular error between current robot direction and desired robot direction

You need to convert \theta_d to a velocity and turning command $\text{vm(translate, rotate, rotate)}$ so that the robot follows a path similar to that shown on the previous page.