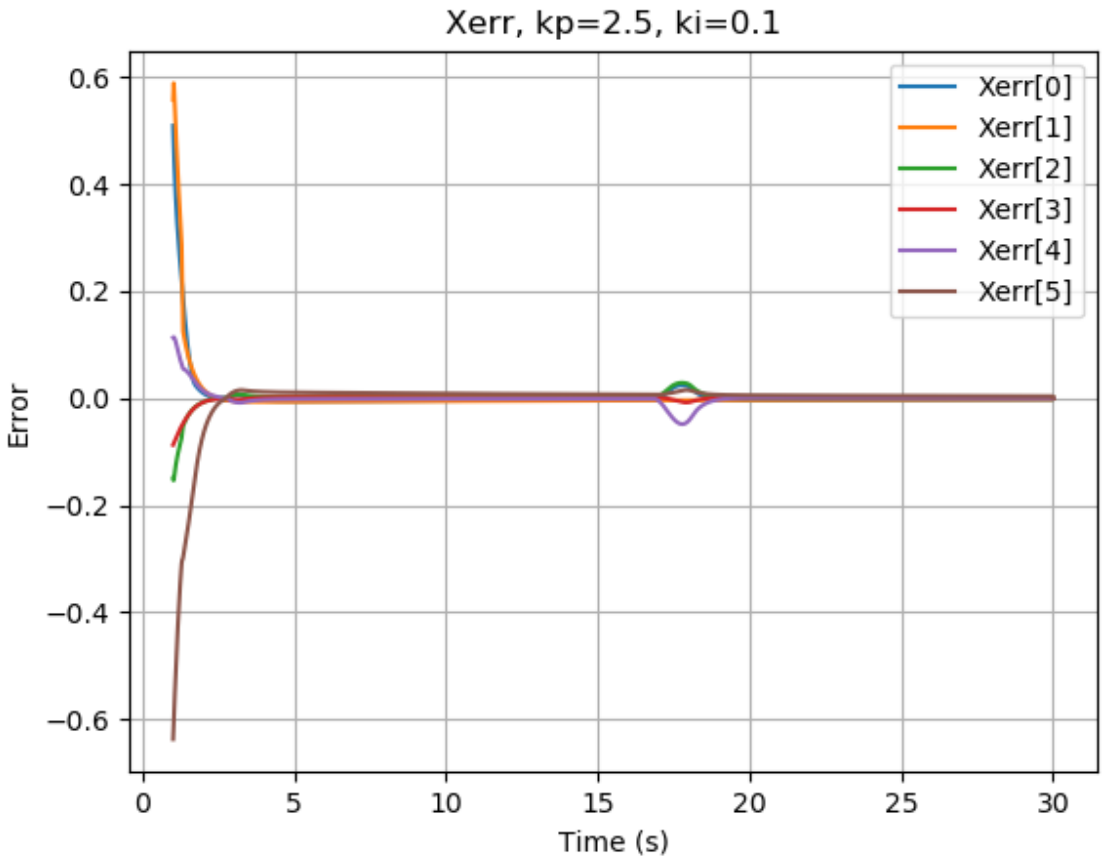
```
# new task config
    initial_config = np.array([0.5236,.2,-.2,0,0,-1,0,0,0,0,0,0,0])

    # The initial configuration of the end-effector in the reference trajectory:
    Tse_initial = np.array([[0, 0, 1,   0],
                            [0, 1, 0,   0],
                            [-1, 0, 0, 0.5],
                            [0, 0, 0,   1]])

    # The cube's initial configuration:
    Tsc_initial = np.array([[1, 0, 0,     1],
                            [0, 1, 0,     0],
                            [0, 0, 1, 0.025],
                            [0, 0, 0,     1]])

    # The cube's desired final configuration:
    Tsc_goal = np.array([[0, 1, 0,          0],
                         [-1, 0, 0,    -1],
                         [0, 0, 1, 0.025],
                         [0, 0, 0,     1]])
```

Controller Type Feedforward-Plus-PI controller



With KP=2.5 and Ki =0.1 , We can see that there is no overshoot, no steady-state error, and fast settling time with a little bump in between after which the plot PI again converges to 0