**Lab: Interfacing RC servo with TIVA C series**

**Aim:** To interface RC servo motor with Tiva and controlling with PWM

**Components:** Tiva board, RC servo motor,

**Connection:**

Connect Red wire to +5v

Connect Brown wire to Gnd

Connect Orange wire to Pin A5 of Tiva board

**Working:**

RC servo works with PWM pulses. A PWM pulse of 20ms time period is generated and depending upon duty cycle (Ton time), the servo motor changes its position

On time 1ms : rotation -90 degree

On time 2ms : rotation 90 degree

On time 1.5ms: rotation 0 degree

Exp1: Generate PWM pulse using SysTick timer and run the servo to move from 0 to +90 degree and 0 to -90 degree.

Exp 2: Generate PWMpulse using SysTick timer and run the servo to move from 0 to 180 degree and 180 degree to 0 degree.