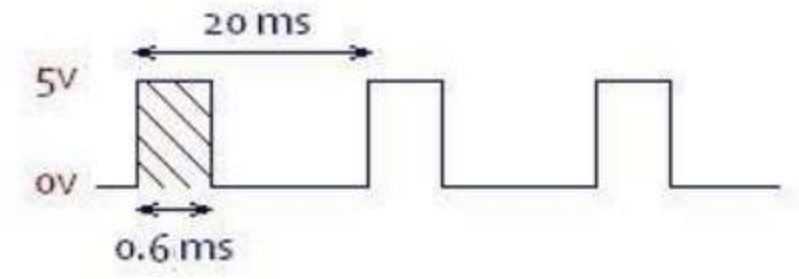
Prelab 3

Dario Rendon

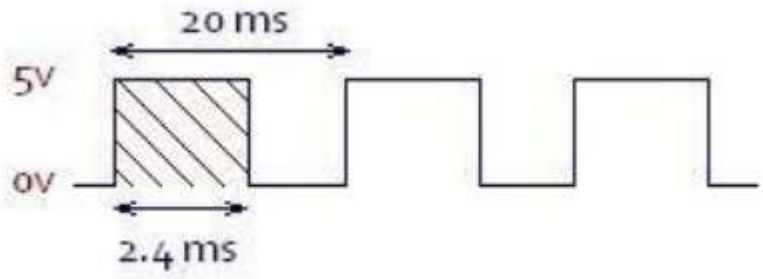
a) Pulse-width modulation (PWM) is a modulation technique that transforms the width of a pulse, based on the modulator signal information.

   A duty cycle describes the proportion of “ON” time versus “OFF” time over the period of the cycle.

b) 3%

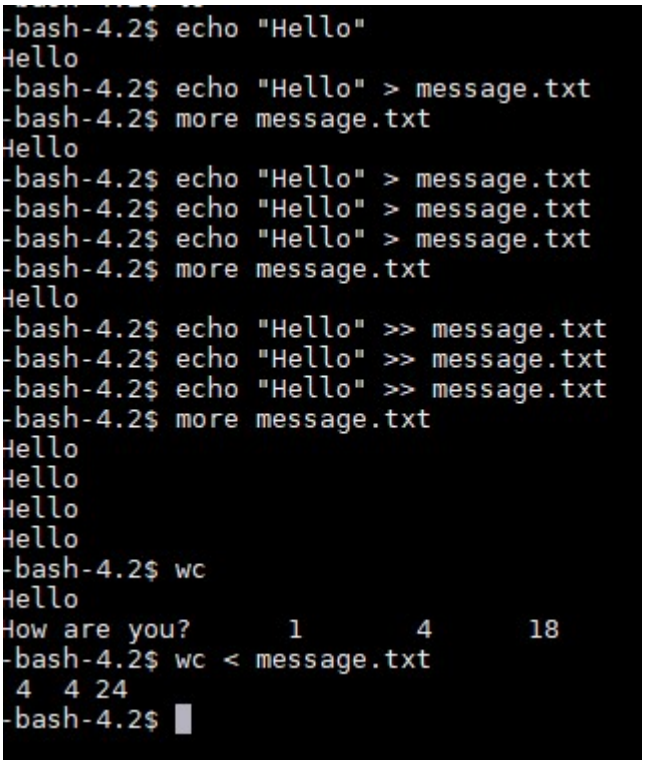


12%



c)
```
/*
 * Converts an angle to a PWM interval in microseconds
 * @param angle The angle 0 to 180 for the servo motor to turn to
 * @return PWM interval in microseconds
 */
int degreeToOnDelay(int angle) {
    return (angle * 10) + 600;
}
```

d)



> in 3.5 is used to set the GPIO configurations and then send the output from setting the configuration to /dev/null which discards the output