

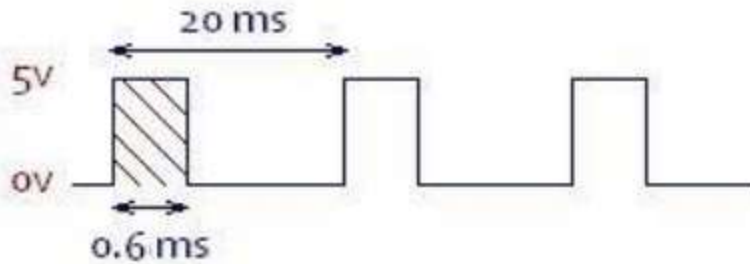
Prelab 3

Dario Rendon

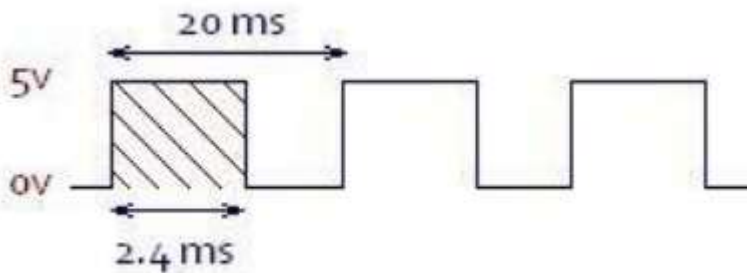
- a) Pulse-width modulation (PWM) is a modulation technique that transforms the width of a pulse, based on the modulator signal information.

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;
}
```

```
-bash-4.2$ echo "Hello"
Hello
-bash-4.2$ echo "Hello" > message.txt
-bash-4.2$ more message.txt
Hello
-bash-4.2$ echo "Hello" > message.txt
-bash-4.2$ echo "Hello" > message.txt
-bash-4.2$ echo "Hello" > message.txt
-bash-4.2$ more message.txt
Hello
-bash-4.2$ echo "Hello" >> message.txt
-bash-4.2$ echo "Hello" >> message.txt
-bash-4.2$ echo "Hello" >> message.txt
-bash-4.2$ more message.txt
Hello
Hello
Hello
Hello
-bash-4.2$ wc
Hello
How are you?      1      4     18
-bash-4.2$ wc < message.txt
 4  4 24
-bash-4.2$ █
```

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