

APPENDIX B

SAMPLE CODING

In this appendix the sample coding which are used for our implementation process is viewed. This code is written in C language and it is compiled and run in Arduino IDE. The code is written in such a way to automate the module processes that controls the Arduino UNO(Microcontroller) based on the conditions and procedures provided in the coding. Arduino UNO controls the following external modules they are, HC-05(Bluetooth module), Stepper Motor with A4988 Driver, Direction Control Valve(DCV), Pneumatic Cylinder.

```
int led=8;

char val;

void setup()
{
    pinMode(led,OUTPUT);
    Serial.begin(19200);
}

void loop()
{
    while(Serial.available() > 0)
    {
        val = Serial.read();
        Serial.println(val);
    }
```

```
if(val == '1')
{
    digitalWrite(led, HIGH);
}
else if(val == '2'){
    digitalWrite(led, LOW);
}
else if(val == '3')
{
    digitalWrite(15,HIGH);
    delay(5000);
    digitalWrite(15,LOW);
}
```

