1. LED BLANKING PROGRAM

```
void setup()
{
  pinMode(4, OUTPUT);
}
void loop() {
  digitalWrite(4, HIGH);
  delay(100);
  digitalWrite(4, LOW);
  delay(100);
}
```

2. SERVO

```
#include <Servo.h>
Servo myservo
int pos = 0;
void setup()
{
  myservo.attach(9);
}
void loop()
{
  for (pos = 0; pos <= 180; pos += 1)
  {
    myservo.write(pos);
    delay(15);
  }
  for (pos = 180; pos >= 0; pos -= 1)
{
  myservo.write(pos);
  delay(15);
  }
}
```

3. ULTRASONIC SENSOR

```
const int pingPin = 7;            // Trigger Pin of Ultrasonic Sensor
const int echoPin = 6;           // Echo Pin of Ultrasonic Sensor
void setup() {
  Serial.begin(9600);             // Starting Serial Terminal
}

void loop()
{
  long duration, inches, cm;
  pinMode(pingPin, OUTPUT);
  digitalWrite(pingPin, LOW);
  delayMicroseconds(2);
  digitalWrite(pingPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(pingPin, LOW);
  pinMode(echoPin, INPUT);
  duration = pulseIn(echoPin, HIGH);
  inches = microsecondsToInches(duration);
  cm = microsecondsToCentimeters(duration);



  Serial.print(inches);
```

```
  Serial.print("in, ");
  Serial.print(cm);
  Serial.print("cm");
  Serial.println();
  delay(100);
}

long microsecondsToInches(long microseconds)
{
  return microseconds / 74 / 2;
}

long microsecondsToCentimeters(long microseconds)
{
  return microseconds / 29 / 2;
}
```

4. TEMPRATURE

```
float temp;
int tempPin = 0;

void setup()
 {
Serial.begin(9600);
}

void loop()
 {
  temp = analogRead(tempPin);
  temp = temp*0.48828125;
  Serial.print("Temprature = ");
  Serial.print(temp);
  Serial.print("*c");
  Serial.print();
  delay(1000);
}
```

5. Embedded C

```
#include<avr/io.h>
#define F_CPU 16000000UL
#include<util/delay.h>

Int main(void)
{
 While(1)
{
 DDRB|=(1<<PB5);
PORTB|=(1<<PB5);
 _delay_ms(500);
PORTB&=~(1<<PB5);
 _dekay_ms(500);
}
return 0;
}
```