

format: Start > A > B > C > D > E > End (linear)

- servo sweep (?) look it up to make the servo slower
- we need 1 light for each scene

——CODE——

```
#include <Servo.h> //imports the library for servo.
```

set up button/servo for A

```
Servo servoA; //create servo variable
```

```
const int buttonAPin = #;
```

```
int buttonAState = 0;
```

```
int lastButtonAState = 0;
```

```
bool A = false;
```

set up B

set up C

set up D

set up E

```
void setup() {
```

```
  myservo.attach(# of pin servo is attached to);
```

```
  pinMode(buttonAPin, INPUT);
```

```
  (do this for B-F)
```

```
  Serial.begin(9600);
```

```
}
```

```
void loop() {
```

```
  buttonAState = digitalRead(buttonAPin);
```

```
  if (buttonAState != lastButtonAState) {
```

```
    if (buttonAState == HIGH) {
```

```
      A = true;
```

```
      (code what the servo(s) will do here)
```

```
      [user adjusts catapult to align the copper tape, when the tape is aligned, triggers servo to pull string that moves the net]
```

```
    }
```

```
  }
```

```
// now that A is true, read button B
```

```
if (A == true) {
```

```
  buttonBState = digitalRead(buttonBPin);
```

```

if (buttonBState != lastButtonBState) {
  if (buttonBState == HIGH) {
    B = true;
    (code what the servo(s) will do here)
    [user puts piece in front of hostile Toothless to show defeat, triggers servo to rotate and
change Hiccup's expression]
  }
}

```

// now that B is true, read button C

```

if (B == true) {
  buttonCState = digitalRead(buttonCPin);
  if (buttonCState != lastButtonCState) {
    if (buttonCState == HIGH) {
      C = true;
      (code what the servo(s) will do here)
      [user puts knife from Hiccup's hand to the outlined spot to align the copper tape, servo
behind Toothless' head spins to change expression]
    }
  }
}

```

// now that C is true, read button D

```

if (C == true) {
  buttonDState = digitalRead(buttonDPin);
  if (buttonDState != lastButtonDState) {
    if (buttonDState == HIGH) {
      D = true;
      (code what the servo(s) will do here)
      [user adjusts Hiccup's arm to put the hammer down, servo spins and reveals prosthetic]
    }
  }
}

```

// now that D is true, read button E

```

if (D == true) {
  buttonEState = digitalRead(buttonEPin);
  if (buttonEState != lastButtonEState) {
    if (buttonEState == HIGH) {
      E = true;
      (code what the servo(s) will do here)
      [user puts prosthetic on Toothless, servo raises separate image of them so it look like they
lifted into the sky (optional clouds)]
    }
  }
}

```

```
}  
}
```

```
// end.
```