```
#include <Stepper.h>
const int stepsPerRevolution = 200; //This is the default for NEMA-17. Try changing it if you have a different Stepper Motor model.

/*

This code requires that the Arduino is kept running since the Arduino cannot remember its last state;
otherwise, make sure to close the window before turning the Arduino off.
The code always starts as the curtain being closed.

 */

int switchPin= 11;
int relay =2;
int state = 0; //Starts with the curtain closed. 0 is closed. 1 is opened.

Stepper myStepper = Stepper(stepsPerRevolution, 10, 9, 6, 5);
void setup()
{
  // Serial.begin(9600); //Optional to monitor the system.

  myStepper.setSpeed(200); //This is the default for NEMA-17. Try changing it if you have a different Stepper Motor model.

  pinMode(relay, OUTPUT);
  pinMode(switchPin, INPUT);
  digitalWrite(relay, HIGH); //I'm using the NC pin in the relay so this keeps the relay off when I first start the arduino.

}
void loop()
{
int buttonState= digitalRead(switchPin);


  if (buttonState == HIGH){

      if (state == 1){
      //Serial.println("OPEN"); //Optional for monitoring
      digitalWrite(relay, LOW);  //opens power to the H-Bridge
      delay(50); //for tolerance

      for (int i=1; i<=16; i++){ //Number of steps to close the curtain. Keep testing until you get the number that works for you.
      //Serial.println(i); //Optional for monitoring
      myStepper.step(-200);
      }
      delay(500); //for tolerance
      digitalWrite(relay, HIGH); //turns off H-Bridge
```

```
      state = 0;
      }


      if (state == 0){
      //Serial.println("CLOSE");
      digitalWrite(relay, LOW);
      delay(50);

      for (int i=1; i<=14; i++){ //Number of steps to close the curtain. Make sure the
steps for OPEN/CLOSE are exactly the same.
      //Serial.println(i);
        myStepper.step(200);
      }

      delay(50);
      digitalWrite(relay, HIGH);
      state = 1;
      }

  }

}
```