

```
//A "Full Drive" program
// for unipolar stepper motors.
//The motor goes forward 400 reps,
// then backward 200 reps, then repeats.
```

```
int coilA = 4;
int coilB = 5;
int coilC = 6;
int coilD = 7;
int reps;
int Fwd = 400;
int Rev = 200;
int Speed = 4;
```

```
void setup() {
  pinMode(coilA,OUTPUT);
  pinMode(coilB,OUTPUT);
  pinMode(coilC,OUTPUT);
  pinMode(coilD,OUTPUT);
}
```

```
void loop() {
  for(reps = 0; reps < Fwd; reps ++){
    digitalWrite(coilA,1);
    digitalWrite(coilB,1);
    digitalWrite(coilC,0);
    digitalWrite(coilD,0);
    delay(Speed);
    digitalWrite(coilA,0);
    digitalWrite(coilB,1);
    digitalWrite(coilC,1);
    digitalWrite(coilD,0);
    delay(Speed);
    digitalWrite(coilA,0);
    digitalWrite(coilB,0);
    digitalWrite(coilC,1);
    digitalWrite(coilD,1);
    delay(Speed);
    digitalWrite(coilA,1);
    digitalWrite(coilB,0);
    digitalWrite(coilC,0);
    digitalWrite(coilD,1);
    delay(Speed);
  }
}
```

```
for(reps = 0; reps < Rev; reps ++){
  digitalWrite(coilA,1);
  digitalWrite(coilB,0);
  digitalWrite(coilC,0);
  digitalWrite(coilD,1);
  delay(Speed);
  digitalWrite(coilA,0);
  digitalWrite(coilB,0);
  digitalWrite(coilC,1);
  digitalWrite(coilD,1);
  delay(Speed);
  digitalWrite(coilA,0);
  digitalWrite(coilB,1);
  digitalWrite(coilC,1);
  digitalWrite(coilD,0);
  delay(Speed);
  digitalWrite(coilA,1);
  digitalWrite(coilB,1);
  digitalWrite(coilC,0);
  digitalWrite(coilD,0);
  delay(Speed);
}
```