

LA M2P6  
Program

```
#define IN1 8

#define IN2 9
#define IN3 10
#define IN4 11
#define PB1 2
#define PB2 3
#define PB3 4
#define PB4 5
int step = 100;
int delaytime=5; //makin kecil delay, makin cepat motor berputar

void setup(){
pinMode(IN1,OUTPUT);
pinMode(IN2,OUTPUT);
pinMode(IN3,OUTPUT);
pinMode(IN4,OUTPUT);
pinMode(PB1, INPUT);
pinMode(PB2, INPUT);
pinMode(PB3, INPUT);
pinMode(PB4, INPUT);
}

void loop(){
int b4 = digitalRead(PB4);
int b3 = digitalRead(PB3);
int b2 = digitalRead(PB2);
int b1 = digitalRead(PB1);

if (b4 == HIGH){
    maju();
}
else if (b3 == HIGH){
    mundur();
}
else if (b2 == HIGH){
    for (int i = 0; i < 60; i ++){
        maju();
    }
    for (int i = 0; i < 60; i++){
        mundur();
    }
}
else if (b1 == HIGH){
    for (int i = 0; i < 50; i++){
        maju();
    }
    delay(2000);
    for (int i = 0; i < 50; i++){
```

```
    mundur();  
  }  
}  
}
```

```
void maju(){  
  //step 4  
  step1();  
  delay(delaytime);  
  //step 3  
  step2();  
  delay(delaytime);  
  //step 2  
  step3();  
  delay(delaytime);  
  //step 1  
  step4();  
  delay(delaytime);  
}
```

```
void mundur(){  
  //step 4  
  step4();  
  delay(delaytime);  
  //step 3  
  step3();  
  delay(delaytime);  
  //step 2  
  step2();  
  delay(delaytime);  
  //step 1  
  step1();  
  delay(delaytime);  
}
```

```
void step1(){  
  digitalWrite(IN1,LOW);  
  digitalWrite(IN2,LOW);  
  digitalWrite(IN3,HIGH);  
  digitalWrite(IN4,HIGH);  
}  
void step2(){  
  digitalWrite(IN1,HIGH);  
  digitalWrite(IN2,LOW);  
  digitalWrite(IN3,LOW);  
  digitalWrite(IN4,HIGH);  
}  
void step3(){  
  digitalWrite(IN1,HIGH);  
  digitalWrite(IN2,HIGH);  
  digitalWrite(IN3,LOW);  
}
```

```
digitalWrite(IN4,LOW);  
}  
void step4(){  
digitalWrite(IN1,LOW);  
digitalWrite(IN2,HIGH);  
digitalWrite(IN3,HIGH);  
digitalWrite(IN4,LOW);  
}
```