C++ Code

```cpp
int trig=4;
int echo=3;
void setup()
{
  Serial.begin(9600);
  pinMode(12, OUTPUT);
  pinMode(2, OUTPUT);
  pinMode(8,INPUT);
  pinMode(7,OUTPUT);
  pinMode(trig,OUTPUT);
  pinMode(echo,INPUT);

}
void loop()
{
  float dur=pulseIn(echo,HIGH);
  float dist=(dur*0.0343)/2;
  int m=digitalRead(8);
  double a=analogRead(A3);
  double v=a/1024;
  double tvolt=v*5;
  double o=tvolt-0.5;
  double t=o*100;
  if (t>50)
  {
  digitalWrite(2,HIGH);
  }
```

```cpp
else
{
digitalWrite(2,LOW);
}
  if(m==1)
  {
    digitalWrite(12, HIGH);;
  }
else
{
 digitalWrite(12, LOW);
}
//digitalWrite(trig,LOW);
//digitalWrite(trig,HIGH);

if(dist<=100)
{
digitalWrite(7,HIGH);

}
else
{
  digitalWrite(7,LOW);

}

}
```

Tinker card: