Any sine wave generation by arduino

Code:-

```
// Formule  y(t) = A sin(wt +p)
// Where; A = Amplitude, w =Angluar Frequency. t = Time , p =Phase Difference
// Frequenvy = 50Hz, 3 Phase R Y B, Phase Angle Difference = 120 degree
// R(t) = A sin ((Angular Frequency * time)+ Phase Angle Difference)
// Y(t) = A sin ((Angular Frequency * time)+ Phase Angle Difference)
// B(t) = A sin ((Angular Frequency * time)+ Phase Angle Difference)
// Programmed By Mr. Adeeb Raza

int R=9;    //R Phase at pin no.9
int Y=10;   //Y Phase at pin no.10
int B=11;   //B Phase at pin no.11

void setup() {
 Serial.begin (9600);
 pinMode(R, OUTPUT);
 pinMode(Y, OUTPUT);
 pinMode(B, OUTPUT);
}

void loop() {
   for (int t=0; t<20; t++){             // one cycle 360 degree movement in 20 mili seconds
   float R = 2.5* sin ((50*t)+0);      // R Phase Zero Degree
   float Y = 2.5* sin ((50*t)+120);  // Y Phase 120 Degree
   float B = 2.5* sin ((50*t)+240);  // B Phase 240 Degree
   digitalWrite(9, OUTPUT);           // R phase Output on pin No. 9
   digitalWrite(10, OUTPUT);         // Y phase Output on pin No. 10
   digitalWrite(11, OUTPUT);         // B phase Output on pin No. 11

   Serial.print(R);
   Serial.print(" ");
   Serial.print(Y);
   Serial.print(" ");
   Serial.print(B);
   Serial.println(" ");
   delay(1);
  }
}
// End code
```