int x=A0; //Analog pin 0  
int y=A1; //Analog pin 1  
int z=A2; //Analog pin 2  
int BuzzerPin=9; //Pin for Buzzer  
void setup()  
{  
pinMode(x,INPUT);  
pinMode(y,INPUT);  
pinMode(z,INPUT);  
pinMode(BuzzerPin,OUTPUT);  
Serial.begin(9600);  
}  
void loop()  
{   
float i=0;  
int thisPitch;   
x=analogRead(x);  
Serial.print("\n\nX="); //prints x-axis acc. due to gravity in terms of voltage level  
Serial.print(x);  
y=analogRead(y);  
Serial.print("\nY="); //prints y-axis acc. due to gravity in terms of voltage level  
Serial.print(y);  
z=analogRead(z);  
Serial.print("\nZ="); //prints z-axis acc. due to gravity in terms of voltage level  
Serial.print(z);  
i=sqrt(pow(x,2)+pow(y,2)+pow(z,2));  
Serial.print("\nI="); //root square intensity value  
Serial.print(i);  
if(i>700)  
{  
thisPitch=map(i,400,1000,120,1500); //frequency range  
tone(BuzzerPin,thisPitch,0); //0% Duty Cycle  
delay(1000);  
}  
else if(i>650&&i<700)   
{  
thisPitch=map(i,400,1000,120,1500); //frequency range  
tone(BuzzerPin,thisPitch,64); //25% Duty Cycle  
delay(1000);  
}   
else if(i>500&&i<600)   
{  
thisPitch=map(i,400,1000,120,1500); //frequency range  
tone(BuzzerPin,thisPitch,127); //50% Duty Cycle  
delay(1000);  
 }  
 delay(1000);  
}