# Code for Digital Keyboard with Sound Output using Arduino

## 1. Code

The following code is used to read the push buttons and activate tones through the piezo buzzer:

```
int notes[] = {262, 294, 330, 349};


void setup() {
  Serial.begin(9600);
}


void loop() {
  int keyVal = analogRead(A0);
  Serial.println(keyVal);


  if (keyVal == 1023) {
    tone(8, notes[0]);
  } else if (keyVal >= 990 && keyVal <= 1010) {
    tone(8, notes[1]);
  } else if (keyVal >= 505 && keyVal <= 515) {
    tone(8, notes[2]);
  } else if (keyVal >= 5 && keyVal <= 10) {
    tone(8, notes[3]);
  } else {
    noTone(8);
```

```
  }
}
```

**Explanation:**

This code reads the analog values from pin A0, which change depending on which push button is pressed. Each voltage level corresponds to one of the four buttons. Based on the detected value, the Arduino plays the matching frequency through the piezo buzzer connected to pin 8. If no button is pressed, the sound output is stopped using the noTone() function.