**電通二乙微處理器實驗 實驗結報**

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| **實驗名稱** | **Lab06-CP2** | | |
| **組別** |  | **組員** | **柯鈺傑** |

1. **實驗目的**

**利用鍵盤讓蜂鳴器發出聲音**

1. **實驗步驟**

**Arduino接鍵盤與蜂鳴器**

1. **程式碼**

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| **#include <Keypad.h>**  **const byte ROWS = 4;**  **const byte COLS=4;**  **byte rowPins[ROWS] = {5, 4, 3, 2};**  **byte colPins[COLS] = {9, 8, 7, 6};**  **byte pin=10;**  **char keys[ROWS][COLS] = {**  **{'F', 'E', 'D', 'C'}, {'B','3','6', '9'},**  **{'A', '2', '5', '8'}, {'0', '1', '4', '7'}**  **};**  **Keypad keypad =Keypad(makeKeymap(keys), rowPins,**  **colPins, ROWS, COLS );**  **void Tone(int a,int b)**  **{**  **tone(a,b);**  **delay(200);**  **noTone(a);**  **}**  **void setup() {**  **pinMode(pin,OUTPUT);**  **}**  **void loop() {**  **char x=keypad.getKey();**  **if(x!=NO\_KEY)**  **{**  **switch(x)**  **{**  **case '0':**  **Tone(pin,262);**  **break;**  **case '1':**  **Tone(pin,294);**  **break;**  **case '4':**  **Tone(pin,330);**  **break;**  **case '7':**  **Tone(pin,349);**  **break;**  **case 'A':**  **Tone(pin,392);**  **break;**  **case '2':**  **Tone(pin,440);**  **break;**  **case '5':**  **Tone(pin,494);**  **break;**  **case '8':**  **Tone(pin,523);**  **break;**  **default:**  **break;**  **}**  **}**  **}** |

1. **實驗結果及分析**

**如預期藉由鍵盤彈奏音階**

1. **心得討論**

**可以模擬電子琴**