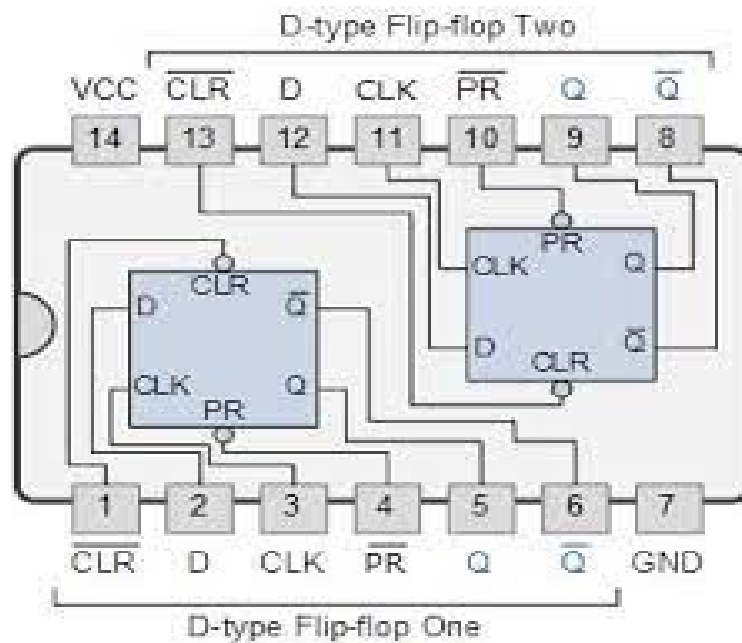


7474

DECADE COUNTER

7474 IC Pin diagram:



7447:



Connections:

	INPUT				OUTPUT				CLOCK	5V			
	W	X	Y	Z	A	B	C	D					
Ar-duino	D6	D7	D8	D9	D2	D3	D4	D5	D13				
7474	5	9			2	12			CLK1CLK2	1	4	10	13
7474			5	9			2	12	CLK1CLK2	1	4	10	13
7447					7	1	2	6			16		

Code:

```
#include <Arduino.h>
```

```
int W,X,Y,Z;
```

```
int D,C,B,A;
```

```
void disp_7447(int D,int C,int B, int A)
```

```
{
    digitalWrite(2, A); //LSB
    digitalWrite(3, B);
    digitalWrite(4, C);
    digitalWrite(5, D); //MSB
}
```

```
void setup() {
```

```
    pinMode(2, OUTPUT);
    pinMode(3, OUTPUT);
    pinMode(4, OUTPUT);
    pinMode(5, OUTPUT);
    pinMode(6, INPUT);
    pinMode(7, INPUT);
    pinMode(8, INPUT);
    pinMode(9, INPUT);
    pinMode(13, OUTPUT);
```

```
}
```

```
void loop() {
```

```
digitalWrite(13, HIGH);
```

```
delay(2000);
```

```
disp_7447(D,C,B,A);
```

```
W = digitalRead(6);
```

```
X = digitalRead(7);
```

```
Y = digitalRead(8);
```

```
Z = digitalRead(9);
```

```
A = (!W);
```

```
B = (!W&&!X&&Y) || (W&&X) || (!W&&Z);
```

```
C = (!W&&Z) || (X&&Y) || (W&&Y);
```

```
D = (!W&&!X&&!Y&&!Z)|| (W&&Z);
```

```
delay(500);
```

```
W = A;
```

```
X = B;
```

```
Y = C;
```

```
Z = D;
```

```
digitalWrite(13, LOW);
```

```
delay(1000);
```

```
}
```

Output:

Incrementing counter from 0 to 9 in seven segment

Whats the processes going on???