

Binary to Decimal

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Binary to Decimal

Components

- Icoboard
- Bread board
- Jumper wires

Binary to Decimal

Method

- Four bit inputs were given from the breadboard to icoboard.
- These were given as input using GPIO pins of the pi.
- Output was displayed in decimal format.

Binary to Decimal

Verilog code

```
module
display4decoder(inputwireclk, inputwireA, inputwireB, inputwireC, inputwireD,
output reg a,output reg b,output reg c,output reg d,);
always @(posedge clk) begin
a=A;
b=B;
c=C;
d=D;
end
endmodule
```

Binary to Decimal

Python code

```
import RPi.GPIO as GPIO

GPIO.setmode(GPIO.BOARD)
GPIO.setup(12, GPIO.IN)
GPIO.setup(16, GPIO.IN)
GPIO.setup(26, GPIO.IN)
GPIO.setup(36, GPIO.IN)

dec=(GPIO.input(36)<math>2^3</math>)+(GPIO.input(26)<math>2^2</math>)+
(GPIO.input(16)<math>2^1</math>)+(GPIO.input(12))
print (dec)
GPIO.cleanup()
```

Binary to Decimal using WiringPi

```
include <stdio.h>
include <wiringPi.h>
include <stdlib.h>

define p1 1
define p2 3
define p3 4
define p4 24
void main ()
wiringPiSetup();
pinMode (p1, INPUT); pinMode (p2, INPUT); pinMode (p3, INPUT);
pinMode (p4, INPUT);
int no;
no = (digitalRead(p1)<math>2^3</math>)+(digitalRead(p2)<math>2^2</math>)+
(digitalRead(p3)<math>2^1</math>)+digitalRead(p4);
```

THANK YOU