# Experiment No 3

## Title :- Interfacing of DAC 0808 with 8051 for wave generation

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1$^{st}$ Part :- Square Wave Generation


Code :-

```
#include<reg51.h>

void MSDelay(unsigned int);

void main()

{

        while(1)

        {

                P1 = 0X00;

                MSDelay(1000);

                P1 = 0XFF;

                MSDelay(1000);

        }

}
```

```c
void MSDelay(unsigned int itime)

{

        unsigned int i , j;

        for(i = 0; i < itime ; i++)

        {

                for(j = 0; j < 1275 ; j++)

                {

                }

        }

}
```
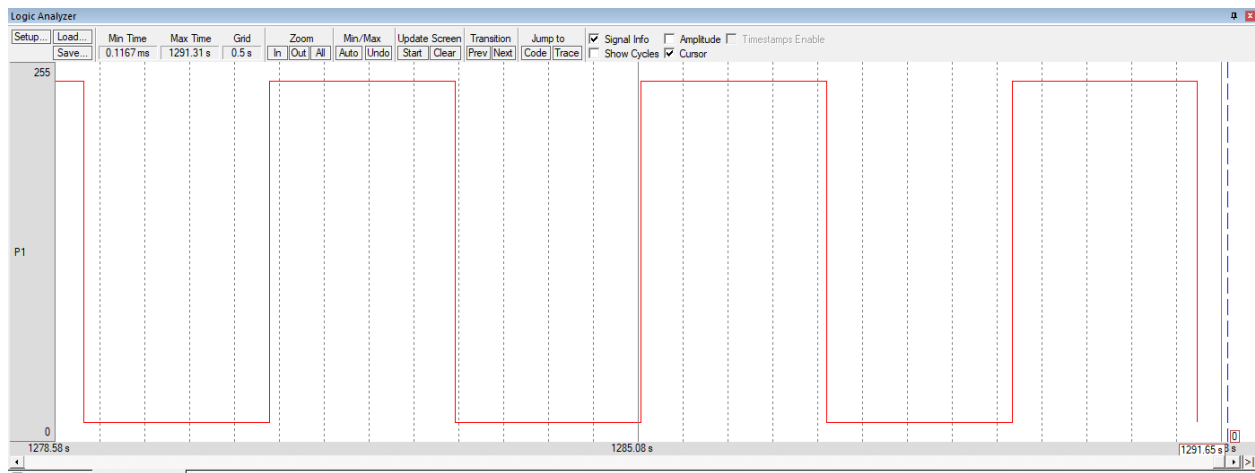
## Output :-

# 2<sup>nd</sup> Part :- Triangular Wave Generation

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Code :-

```
#include<reg51.h>

void main(){

        while(1){

        int i;

        for(i=0;i<=255;i++){

                P1=i;

                }

                for(i=255;i>=0;i--){

                P1=i;

                }

        }

}
```
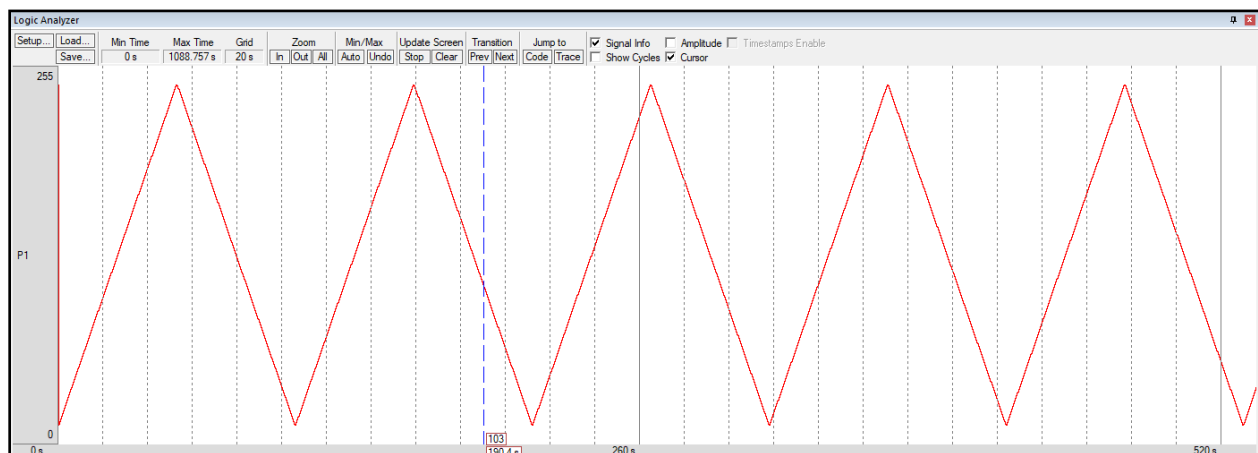
## Output :-

# 3<sup>rd</sup> Part :- Sine Wave Generation

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Code :-

```
#include<reg51.h>

void main(){

unsigned char sine_val[12]={128,192,238,255,238,192,128,64,17,0,17,64};

                unsigned char x;

                while(1)

                {

                        for(x=0;x<12;x++)

                        {

                        P1=sine_val[x];

                        }

                }

}
```

## Output :-