LAB 1-PARALLEL PORT I/O

CO326 – Computer Systems Engineering: Industrial Networks

GROUP NO. - 13
SEMESTER 6
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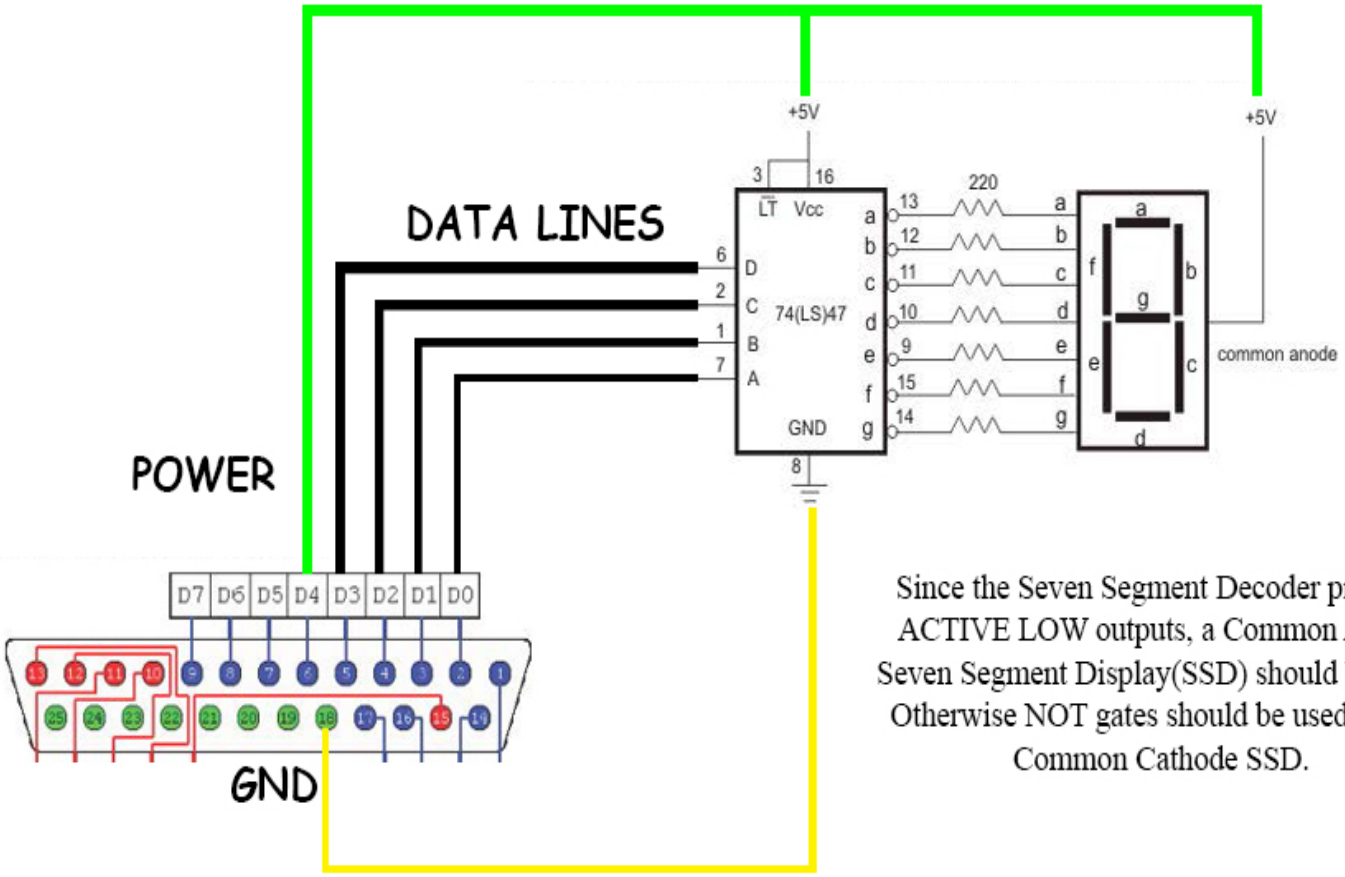
Task 01 – Display 0-9 numbers on a single 7 segment display

Circuit Diagram



Code

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/io.h>
#include <math.h>

#define BASE 0x378 /*base address*/
```

```
int dataport = BASE;
int statusport = BASE+1;
unsigned char status, data;

int main(){
	if(ioperm(BASE,1,1)){
		fprintf(stderr, "Access denied to %x\n", BASE);
		exit(1);
	}
	fprintf(stdout, "Started...\n")
	while(1){
		int i;
		for (i=0; i < 10; i++){
					fprintf(stdout, "send %d\n",i);
			outb(i+128,BASE);
			sleep(1);
		}
	}
}
```

Task 2 – Take input from parallel port

Code

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/io.h>
#include <math.h>

#define BASE 0x378 /*base address*/
```

```
int dataport = BASE;
int statusport = BASE+1;
unsigned char status, data;

int main(){
	if (ioperm(BASE,1,1) || ioperm(BASE+1,1,1)){
		fprintf(stderr,"Access denied to %x\n",BASE);
		exit(1);
	}
	fprintf(stdout, "Started...\n");
	while (1){
		fprintf(stdout, "Begin input...\n");
		status = inb(statusport);
		data = status;
		fprintf("%d\n", data);
		outb(data,BASE);
		sleep(1);
	}
	return 0;
}
```