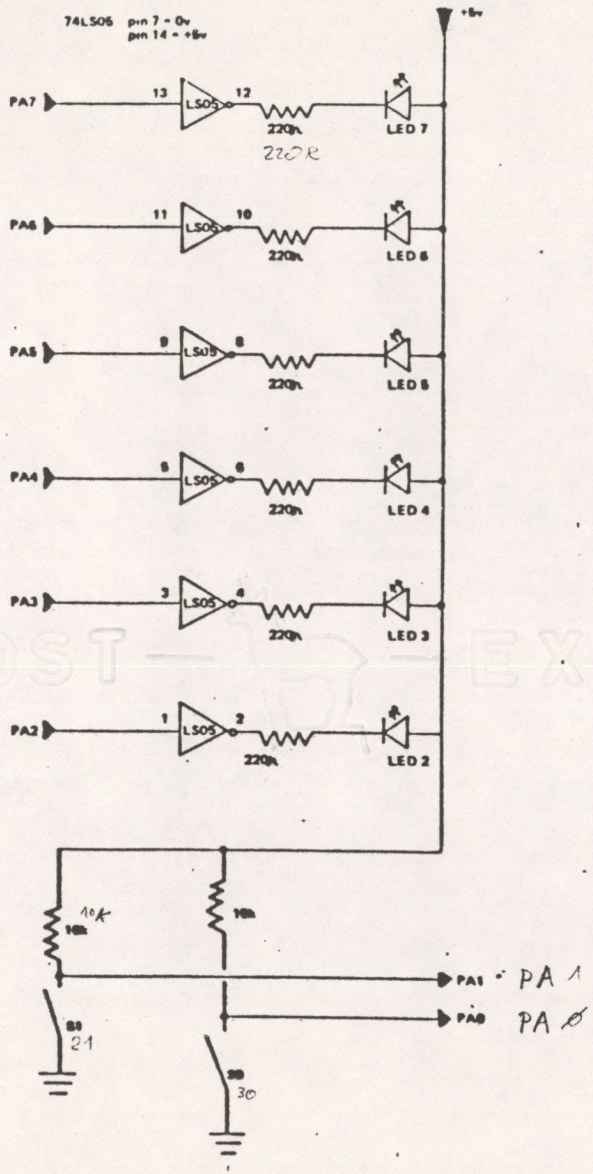

FIG 11b – LAMPS AND SWITCHES EXPERIMENT

EXPERIMENTS WITH THE LED's and SWITCHES

Always start your BASIC programs with:

```
10  REM Port A initialisation program
20  LET DA = 31
30  LET CA = 93
40  OUT CA,255
50  OUT CA,3
```

This will set up port A correctly for your program.

SOME INPUT

It is possible to generate each of the binary numbers 00, 01, 10, 11 equivalent t
0 — 3 in decimal with the switches in different positions. Try the following progran
loop to see how the number displayed changes with different switch positions.

```
100  LET x = IN DA
120  PRINT "My input switches read ";x
130  GO TO 100
```

Some output

The LED's allow us to display any binary number from 0 —63. The followin
program will do this for you:

```
100  INPUT "Number? ";A
110  LET A = A * 4
120  OUT DA,A
130  GO TO 100
```

Now that you have seen how to do some simple input and output with the PIC
you could write a program which counts up in binary automatically. By operatin
one of the switches the program could then start to count down in binary.