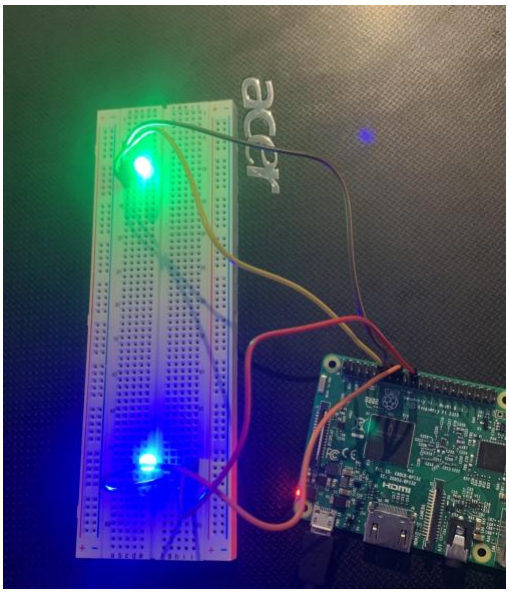
CODE

```
BASE = 0x3F000000        ; $ means HEX
GPIO_OFFSET=$200000
mov r0,BASE
orr r0,GPIO_OFFSET ;r0 now equals 0xFE200000

mov r1,#1
lsl r1,#24 ;write 1 into r1, lsl 24 times to move the 1 to bit 24
str r1,[r0,#4] ;write it into 5th (16/4+1)block of function register

mov r1,#1
lsl r1,#18 ;write 1 into r1, lsl 18 times to move the 1 to bit 18
str r1,[r0,#28] ;write it into first block of pull-up register

mov r1,#1
lsl r1,#9 ;write 1 into r1, lsl 9 times to move the 1 to bit 9
str r1,[r0,#8] ;write it into 9th (16/8+1)block of function register

mov r1,#1
lsl r1,#23 ;write 1 into r1, lsl 23 times to move the 1 to bit 23
str r1,[r0,#28] ;write it into first block of pull-up register

loop$:
b loop$ ;loop forever
```

EVIDENCE



16.1.

```
BASE = 0x3F000000         ; $ means HEX
GPIO_OFFSET=$200000
mov r0,BASE
orr r0,GPIO_OFFSET ;r0 now equals 0xFE200000
```

16.2.

```
mov r1,#1
lsl r1,#24 ;write 1 into r1, lsl 24 times to move the 1 to bit 24
str r1,[r0,#4] ;write it into 5th (16/4+1)block of function register

mov r1,#1
```

16.3.

```
mov r1,#1
lsl r1,#18 ;write 1 into r1, lsl 18 times to move the 1 to bit 18
str r1,[r0,#28] ;write it into first block of pull-up register

mov r1,#1
```

16.4.

```
loop$:
b loop$ ;loop forever
```

19.1

```
mov r1,#1
lsl r1,#9 ;write 1 into r1, lsl 9 times to move the 1 to bit 9
str r1,[r0,#8] ;write it into 9th (16/8+1)block of function register
```

19.2.

```
mov r1,#1
lsl r1,#23 ;write 1 into r1, lsl 23 times to move the 1 to bit 23
str r1,[r0,#28] ;write it into first block of pull-up register
```

20.1. 9-bit
20.2 8
20.3 23
20.4 28

22.1

```
mov r1,#1
lsl r1,#23 ;write 1 into r1, lsl 23 times to move the 1 to bit 23
str r1,[r0,#28] ;write it into first block of pull-up register
```

22.2

```
mov r1,#1
lsl r1,#23 ;write 1 into r1, lsl 23 times to move the 1 to bit 23
str r1,[r0,#40] ;write it into first block of pull-up register
```