Class 1 TASK Program

```
18  #include <xc.h>
19  #define _XTAL_FREQ 20000000  // 20 MHz
20  void main(void) {
21      // Initialize PORTD
22      TRISD = 0x00;  // Set PORTD as output
23      PORTD = 0x00;  // Clear PORTD initially
24      // Main loop
25      while(1){
26          // Pattern 1: RD7 -> HIGH, RD2 -> LOW
27          PORTD = 0x80; // 1000 0000
28          __delay_ms(3000);
29
30          // Pattern 2: RD7 -> LOW, RD2 -> HIGH
31          PORTD = 0x04; // 0000 0100
32          __delay_ms(3000);
33
34          // Pattern 3: RD7 -> HIGH, RD2 -> HIGH
35          PORTD = 0x84; // 1000 0100
36          __delay_ms(3000);
37
38          // Pattern 4: RD7 -> LOW, RD2 -> LOW
39          PORTD = 0x00; // 0000 0000
40            __delay_ms(3000);
```