Q1 soluion:

#define *F\_CPU* 1000000UL

#include <avr/io.h>

#include <avr/delay.h>

int main(void)

{

DDRA = 0b00000001;

while(1)

}

PORTA = 0b00000001;

*\_delay\_ms*(1000);

PORTA = 0b00000000;

*\_delay\_ms*(1000);

{

return 0;

}

Q2 Solution:

#define *F\_CPU* 1000000UL

#include <avr/io.h>

#include <avr/delay.h>

int main(void)

{

int i = 0;

DDRA = 0b00001111;

while(1)

{

for(i=0;i<4;i++)

{

PORTA = (0b00000001 << i);

if(i<3)

{

*\_delay\_ms*(1000);

}

}

for(i=0;i<4;i++)

{

PORTA = (0b00001000 >> i);

if(i<3)

{

*\_delay\_ms*(1000);

}

}

return 0;

}