```
#define R1 2       //red led 1
#define R2 5       //red led 2
#define Y1 3       //yellow led 1
#define Y2 6       //yellow led 2
#define G1 4       //green led 1
#define G2 7       //green led 2
#define BI 8       //button input
#define BO 9       //button output
#define Rd 1000    //Delay red-red
#define Yd 1000    //Delay yellow
#define Gds1 3000  //Delay green serie 1
#define Gds2 1000  //Delay green serie 2
#define Nd 500     //nightmode delay
#define Nl 11      //Night Led

int mode=0;
int pcase;

void setup()
{
   pinMode(R1,OUTPUT);
   pinMode(R2,OUTPUT);
   pinMode(Y1,OUTPUT);
   pinMode(Y2,OUTPUT);
   pinMode(G1,OUTPUT);
   pinMode(G2,OUTPUT);
   pinMode(BO,OUTPUT);
   pinMode(Nl,OUTPUT);
   digitalWrite(R1,HIGH);
   digitalWrite(R2,HIGH);
   digitalWrite(Y1,LOW);
   digitalWrite(Y2,LOW);
   digitalWrite(G1,LOW);
   digitalWrite(G2,LOW);
   digitalWrite(BO,HIGH);


}

void loop()
{

   switch(mode)
   {
   case 0:
      digitalWrite(Nl,LOW);
      digitalWrite(R1,HIGH);
      digitalWrite(R2,HIGH);
      digitalWrite(Y1,LOW);
      digitalWrite(Y2,LOW);
      digitalWrite(G1,LOW);
      digitalWrite(G2,LOW);
      digitalWrite(BO,HIGH);
      pcase=mode;
      digitalWrite(Y1,LOW);
      digitalWrite(Y2,LOW);
      digitalWrite(R2,HIGH);
      scan(Rd);
      if (pcase!=mode)
      {
         break;
      }
      digitalWrite(R2,LOW);
      digitalWrite(G2,HIGH);
      scan(Gds1);
      if (pcase!=mode)
      {
         break;
      }
```

```
      digitalWrite(G2,LOW);
      digitalWrite(Y2,HIGH);
      scan(Yd);
      if (pcase!=mode)
      {
        break;
      }
      digitalWrite(Y2,LOW);
      digitalWrite(R2,HIGH);
      scan(Rd);
      if (pcase!=mode)
      {
        break;
      }
      digitalWrite(R1,LOW);
      digitalWrite(G1,HIGH);
      scan(Gds2);
      if (pcase!=mode)
      {
        break;
      }
      digitalWrite(G1,LOW);
      digitalWrite(Y1,HIGH);
      scan(Yd);
      if (pcase!=mode)
      {
        break;
      }
      digitalWrite(Y1,LOW);
      digitalWrite(R1,HIGH);
      break;
    case 1:
      digitalWrite(NI,HIGH);
      digitalWrite(R1,LOW);
      digitalWrite(R2,LOW);
      digitalWrite(G1,LOW);
      digitalWrite(G2,LOW);
      digitalWrite(Y1,HIGH);
      digitalWrite(Y2,LOW);
      scan(Nd);
      digitalWrite(Y1,LOW);
      digitalWrite(Y2,HIGH);
      scan(Nd);
      break;
    default:
      mode=0;
    }


}
void scan(int time)
{
  for (int i=0; i<time; i++)
  {
    delay(1);
    if (digitalRead(BI)==HIGH)
    {
      mode=mode+1;
      delay(1000);
      break;
    }
  }
}
```