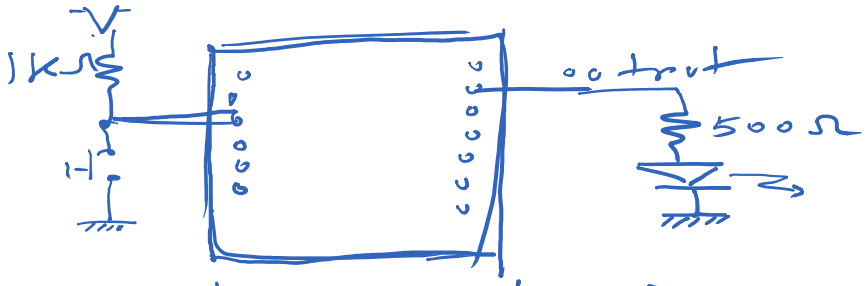
Compiler ⟶ ---.bin Download file

USB connect the board

board as a flash Memory

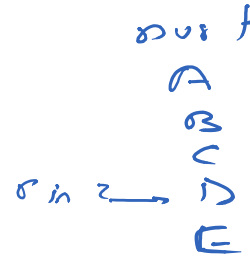
copy ---.bin file into board

reset

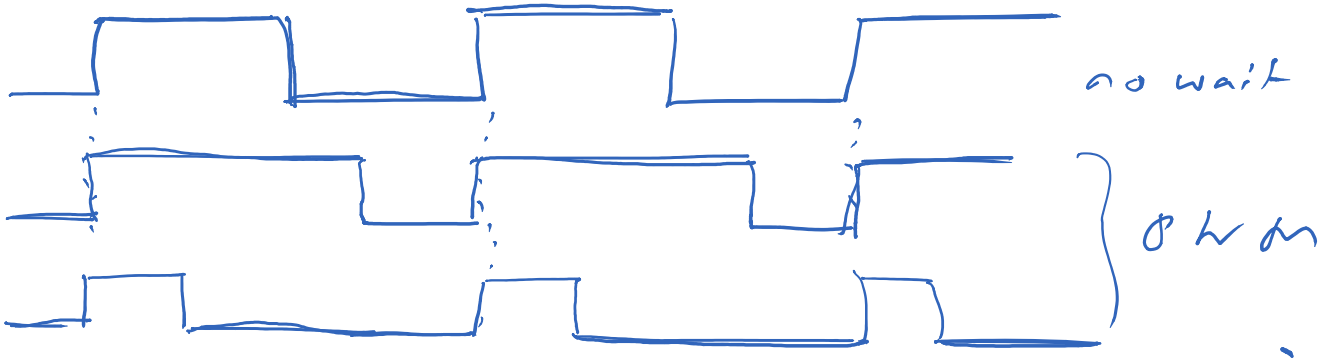


blinking LED

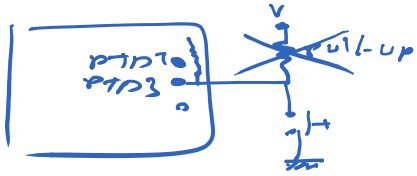
(hello world)




```
#include "mbed.h"
DigitalOut LedPin(PTD2);
int main()
    LedPin = 1;
    while(true)
    {
        wait(0.5);
        Ledpin = 0;
        wait(0.5);
        LedPin = 1;
    }
}
```



```
#include "mbed.h"
PwmOut LedPwm (PTD2);
int main()
{
    LedPwm.period (0.01);
    LedPwm = 0.0;
    while(true)
    {
        for(float val=0.0; val<1.0; val+=0.05){
        LedPwm = val;
        wait(0.05)
        }
        for(float val=1.0; val>0.0; val-=0.05)
        {
          LedPwm = val;
          wait(0.05);
        }
    }
}
```




```
#include "mbed.h"
DigitalIn  switchon(PTD3, pullup);
DigitalOut LedPin(PTD2);
int main()
{
  LedPin = 0;
  while(true)
  {
     if (switchon == true)
        LedPin = 1;
     else
        LedPin = 0;
  }
}
```

output
pwm output
input

Project 0

Each switch step 20% light
returns to off state

a) with pwm
b) without pwm