Nirbhay Sharma (B19CSE114)

DSL - Lab -9

Task-1

```c
#include "stm32f4xx.h"
void delay(int dd){
    for (int i = 0;i<dd;i++){
        for (int j = 0;j<300000;j++){
            ;
        }
    }
}

main(void)
{

    RCC->AHB1ENR = 0X40; // ENABLING CLOCK FOR PORT G
    GPIOG->MODER = 0X14000000;
    GPIOG->ODR = (1<<13) | (1<<14);
    while (1) {
        GPIOG->ODR = 0X0;
        delay(100);
        GPIOG->ODR = (1<<13) | (1<<14);
        delay(100);
    }

}
```

logic

1. first set GPIOG clock using 0x40
2. then set $PG13$, $PG14$ on output mode (01) using 0x14000000
3. then set odr to $\left((1 << 13)|(1 << 14)\right)$ to enable 13th and 14th pin or glow them.
4. then run a while loop and simply set the values accordingly in order to toggle led's with some delay

Task-2

part-a

Hello my name is nirbhay sharma and I study in IIT Jodhpur

part-b

part-c

Task-3

Task-4

Task-5

Task-6

```
void setup() {
  // put your setup code here, to run once:

  Serial.begin(9600);
}

void loop() {
  // put your main code here, to run repeatedly:
  int aread1 = analogRead(A1);
  delay(1);
  int aread2 = analogRead(A2);

  if (aread2 > aread1){
    Serial.println(aread2);
  } else {
    Serial.println("printing Nothing");
  }
}
```