

```
#include "temperature.h"
```

```
void temp_init(void){
```

```
    RCC->APB2ENR |= RCC_APB2ENR_IOPBEN | RCC_APB2ENR_AFIOEN;
    GPIOB->CRL &= ~(GPIO_CRL_MODE0 | GPIO_CRL_CNF0);
    RCC -> APB2ENR |= RCC_APB2ENR_ADC1EN;
    ADC1 -> CR2 = 0x00000001;
}
```

```
int ADC_Read(void){
```

```
    ADC1->SQR3 &= ~0x0000000F; // Clear the first conversion in the sequence
    ADC1->SQR3 |= 0x00000008;

    ADC1-> CR2 |= ADC_CR2_ADON;
    while(!(ADC1->SR & ADC_SR_EOC))
    {}
    return ADC1->DR;
}
```