# Problem Definition

In this assignment we are asked to create a clock that runs on arduino board. But in this assignment we created a simple clock that increments a counter by 1 every second. If user press a button we need to write the time to screen. But when getting input from the button we need to use interrupts. Because we if we don’t use it we must check if the button is pressed or not and this is not an efficient way. Because may be user never press the button. And we check it ever loop approximately ever 60 ns. This is very power consuming and in real life system we has to consider power consumption of the system and manage power accordingly. Using interrupt gave us a change that instead of checking input every loop we write a simple function that prints the time to screen, when user press the button an interrupt signal rises and built in ISR of arduino execute the function body that we have written. When it is done ISR return to main proccess which is incrementing a counter every second by 1.