# Digital clock

A **digital clock** is a type of [clock](https://en.wikipedia.org/wiki/Clock) that displays the time [digitally](https://en.wikipedia.org/wiki/Digital_data) as opposed to an analog clock, where the time is indicated by the positions of rotating hands.

**Why we need digital clock?**

Because digital clocks can be very small and inexpensive devices that enhance the popularity of product designs, they are often incorporated into all kinds of devices such as cars, radios, [televisions](https://en.wikipedia.org/wiki/Television), [microwave ovens](https://en.wikipedia.org/wiki/Microwave_oven), standard [ovens](https://en.wikipedia.org/wiki/Oven), computers and cell phones. Sometimes their usefulness is disputed: a common complaint is that when time has to be set to Daylight Saving Time, many household clocks have to be readjusted. The incorporation of automatic synchronization by a radio time signal is reducing this problem.

# C program to design a digital clock :

This program will **generate a digital clock using c program**. The logic behind to implement this program,

* Initialize hour, minute, seconds with 0.
* Run an infinite loop.
* Increase second and check if it is equal to 60 then increase minute and reset second to 0.
* Increase minute and check if it is equal to 60 then increase hour and reset minute to 0.
* Increase hour and check if it is equal to 24 then reset hour to 0.

**Code :**

#include <stdio.h>

#include <windows.h>

int main()

{

int h=0,m=0,s=0;

while(1)

{

for(h=0; h<24; h++)

{

for(m=0; m<60; m++)

{

for(s=0; s<60; s++)

{

system("CLS");

printf("\n\n\t\t\t\t DIGITAL CLOCK");

printf("\n\n\t\t\t\t HOUR : MINUTE : SECOND");

printf("\n\n\t\t\t\t %02d : %02d : %02d\n",h,m,s);

Sleep(1000);

}

s=0;

}

m=0;

}

}

}

**Result :**

DIGITAL CLOCK

HOUR : MINUTE : SECOND

00 : 01 : 50