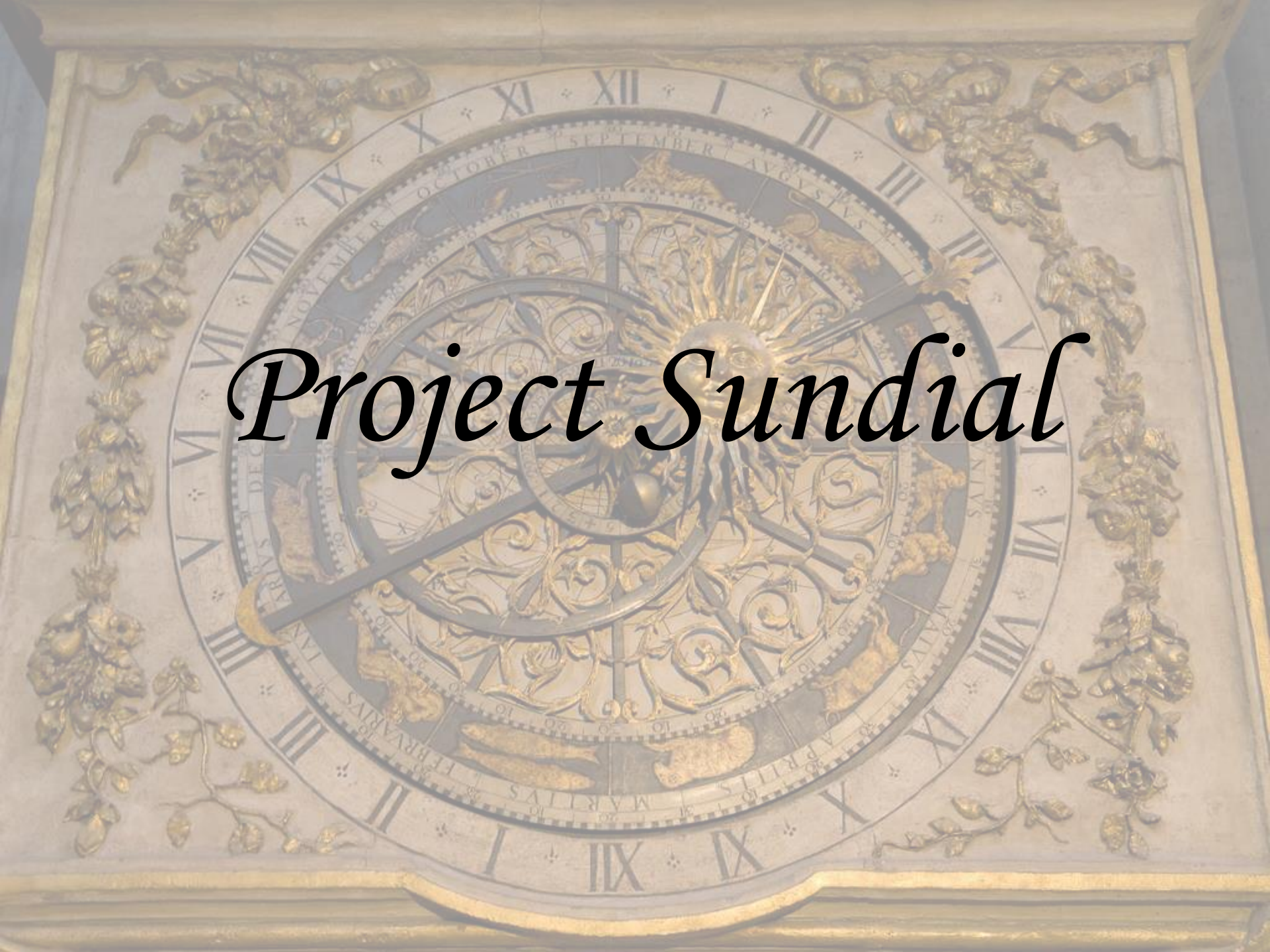

Project Sundial

Project Sundial

Team members:

1. Mahajabin Tabassum (Leader)

   ID: 200041132

   Group: 1B

2. Jarin Tasnim Hridy

   ID: 200041108

   Group: 1B

3. Amina

   ID: 200041155

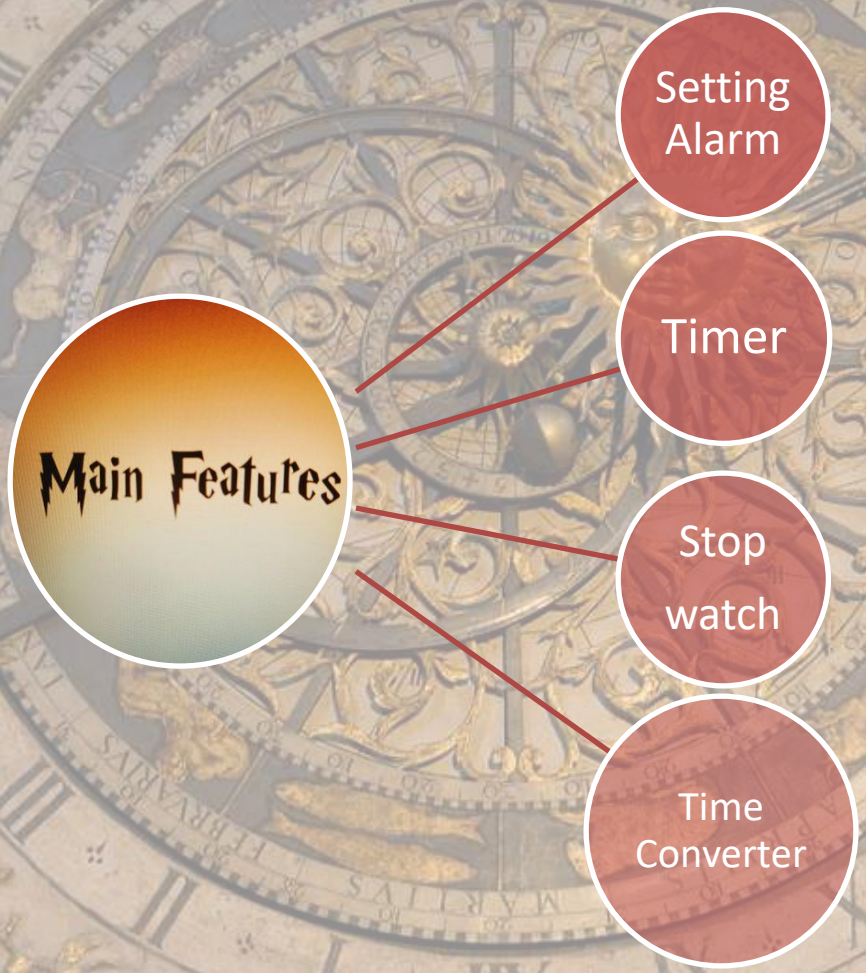
   Group: 1A

Project Sundial

Objective:

The aim of the project is to design a Digital Clock that displays the time digitally, by contrast to a sundial. The project focuses on making a clock with unique features of voice generator and visual warning in alarm, timer, stopwatch and time for different places using C.

Project Sundial



Specialities

Speech generator

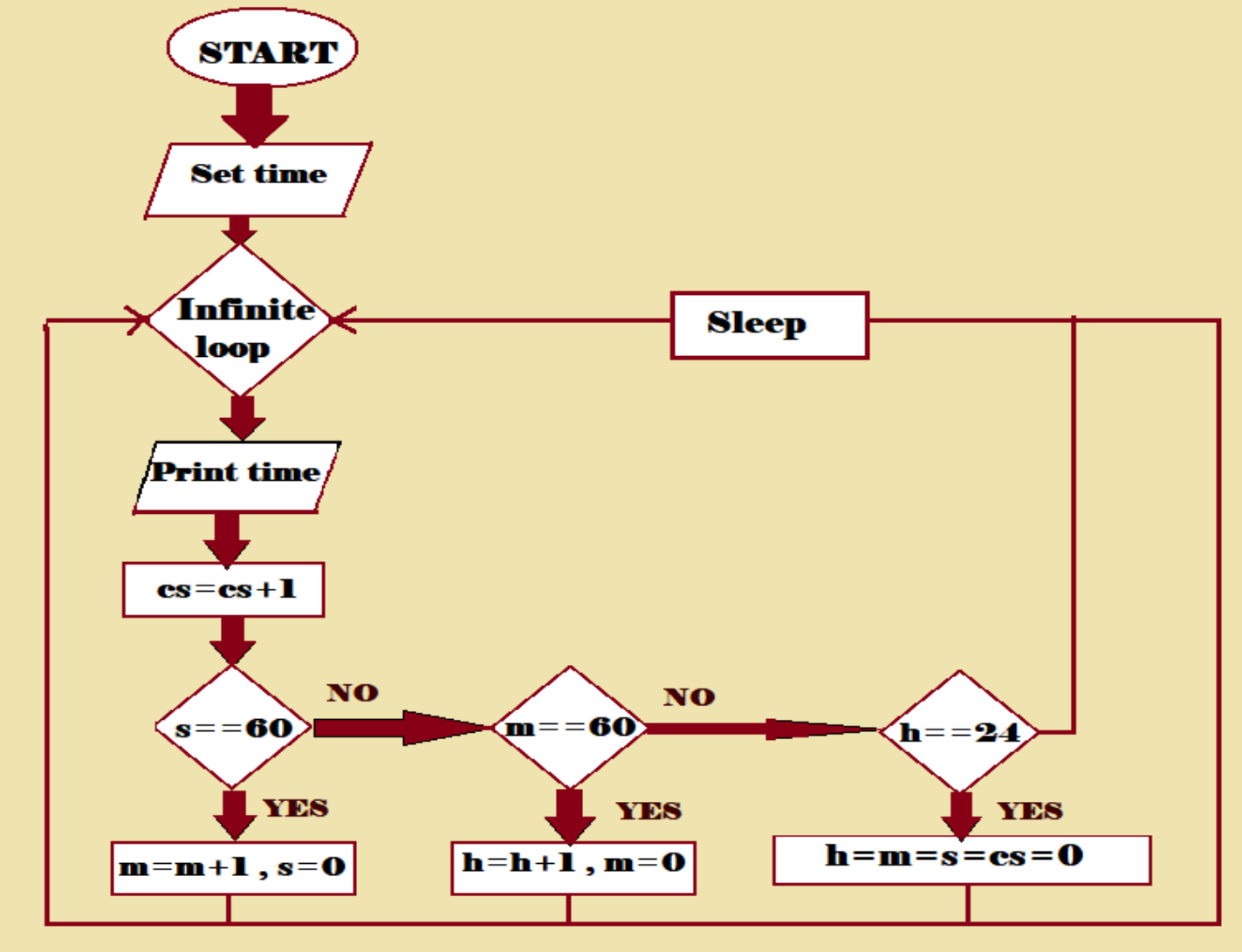
Using software of eSpeak voice synthesizer for windows.

Use of Multi Thread

- Runs digital clock in the main thread

- Other threads can read the current clock time of the main thread

Flow Chart of the Clock



Project Sundial

Menu Bar

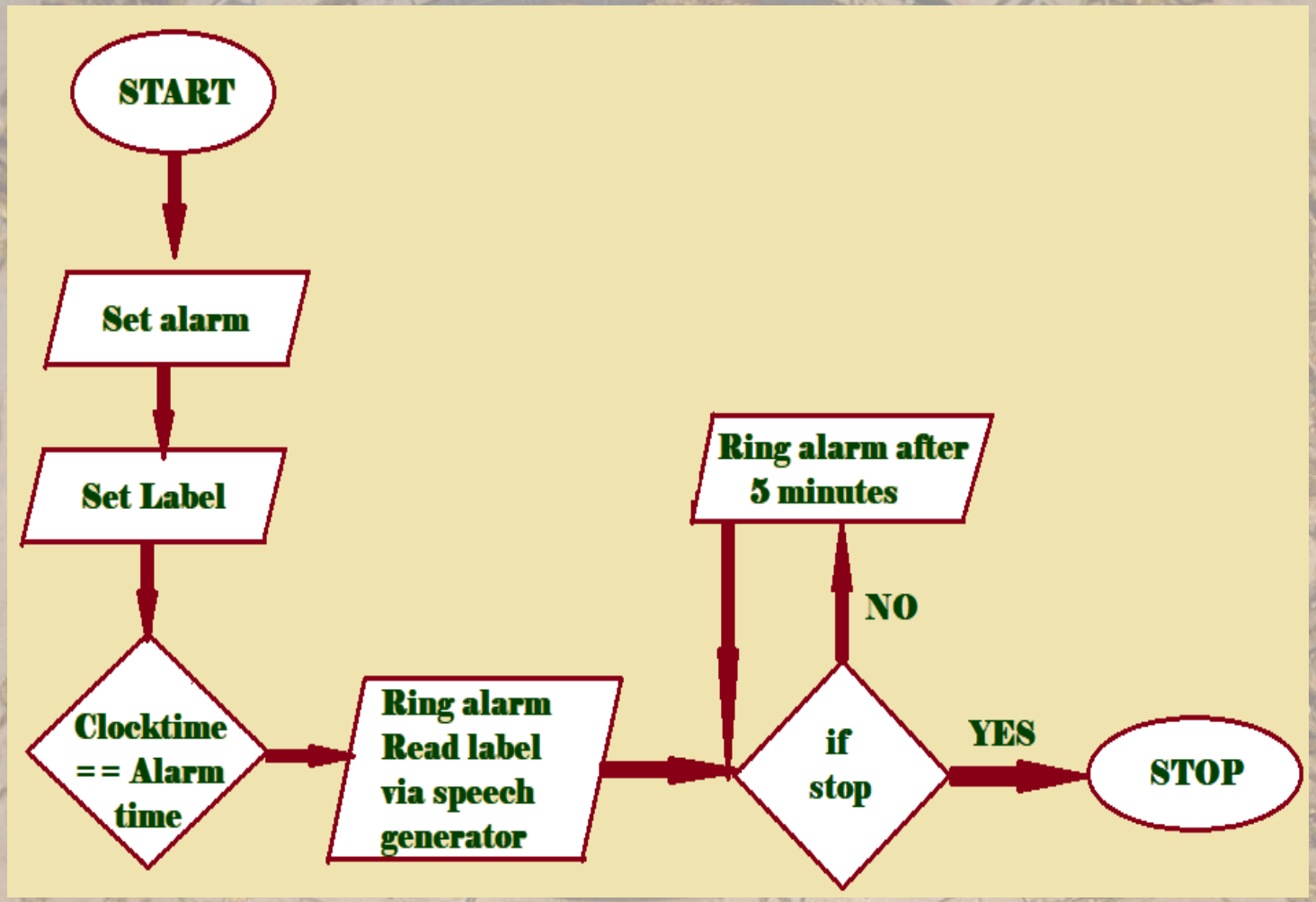
1. *Reset clock time*
2. *Set Alarm*
3. *Start Stop watch*
4. *Set Timer*
5. *Convert Time*
6. *End Program*

Setting Alarm

Functionalities:

- *Take input of*
  1. *Time in HH:MM format*
  2. *Label (the task user is to do)*
- *While ringing read aloud in the format of "It is [time]. Get ready for [label]."*
- *Snooze for 5 minutes option*

Flow Chart of Alarm

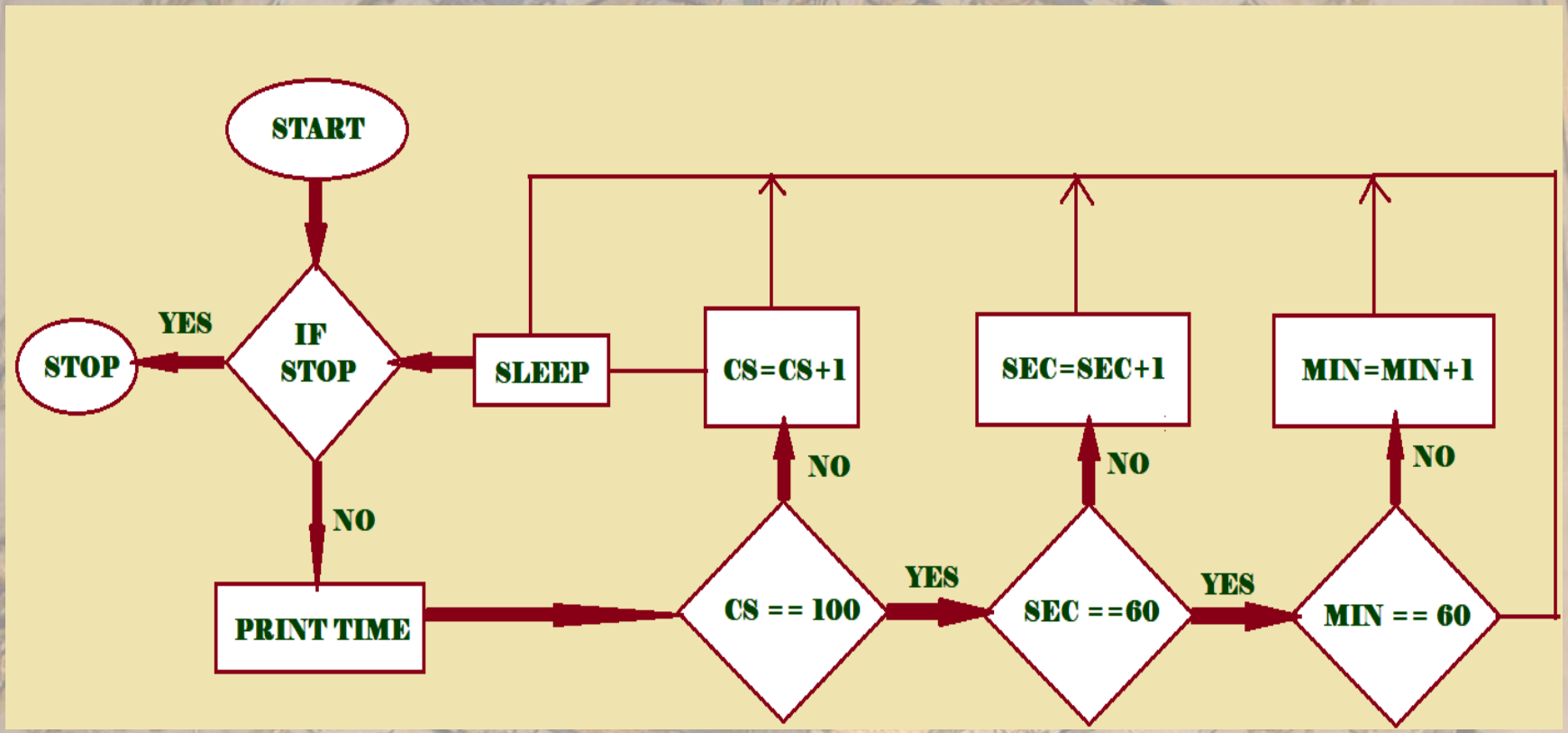


Stopwatch

Functionalities:

- *Propagate in the format MM:SS:CentiSec*
- *Sleep for 1/100 second*
- *Stop when user enters ‘ S ’*
- *Read out total time count*

Flow Chart of Stopwatch

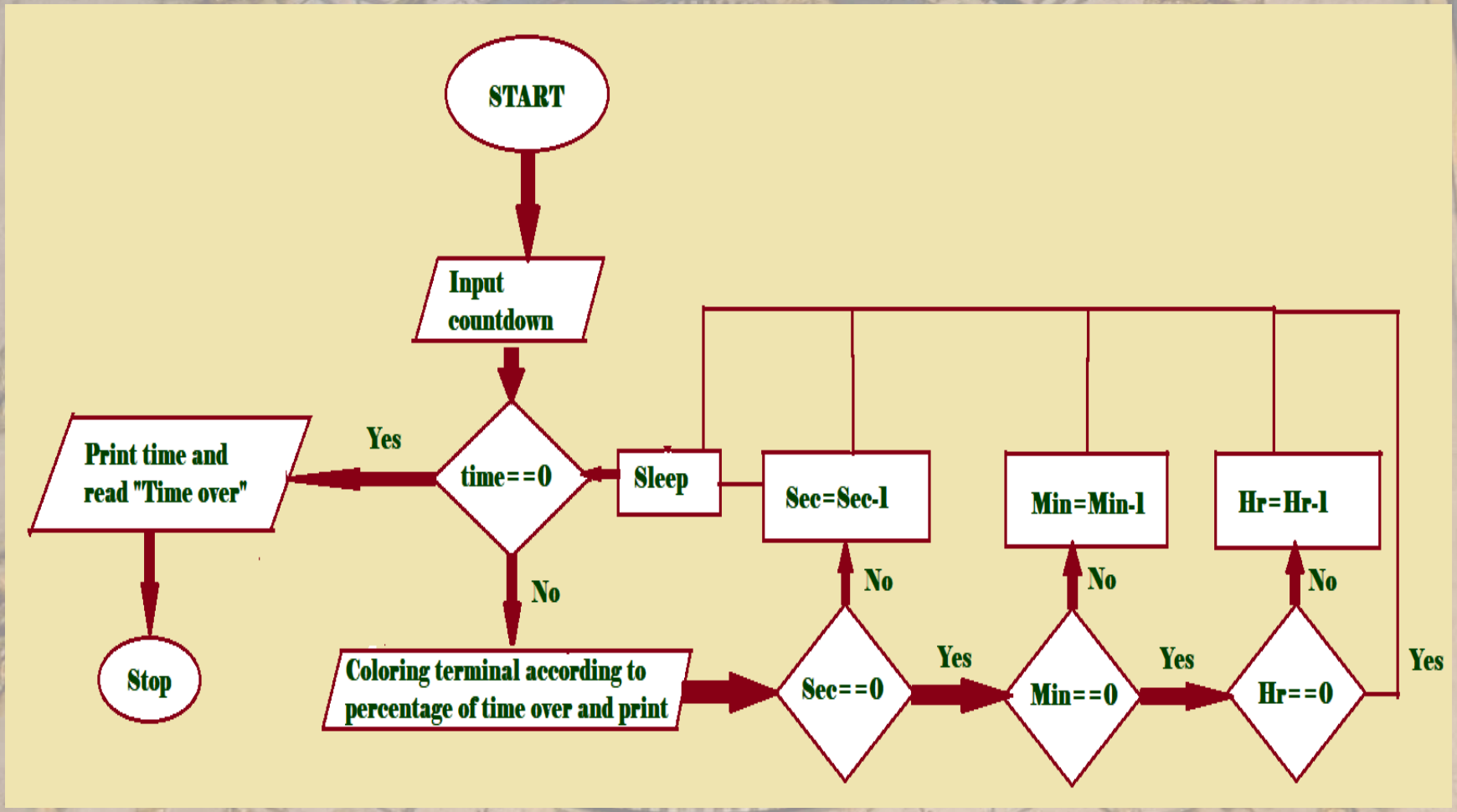


Timer

Functionalities:

- *Take input in HH:MM:SS format.*
- *Countdown*
- *Color the terminal*
  - *Yellow after 50%*
  - *Red after 85%*
- *Read aloud "Time is over."*

Flow Chart of Timer

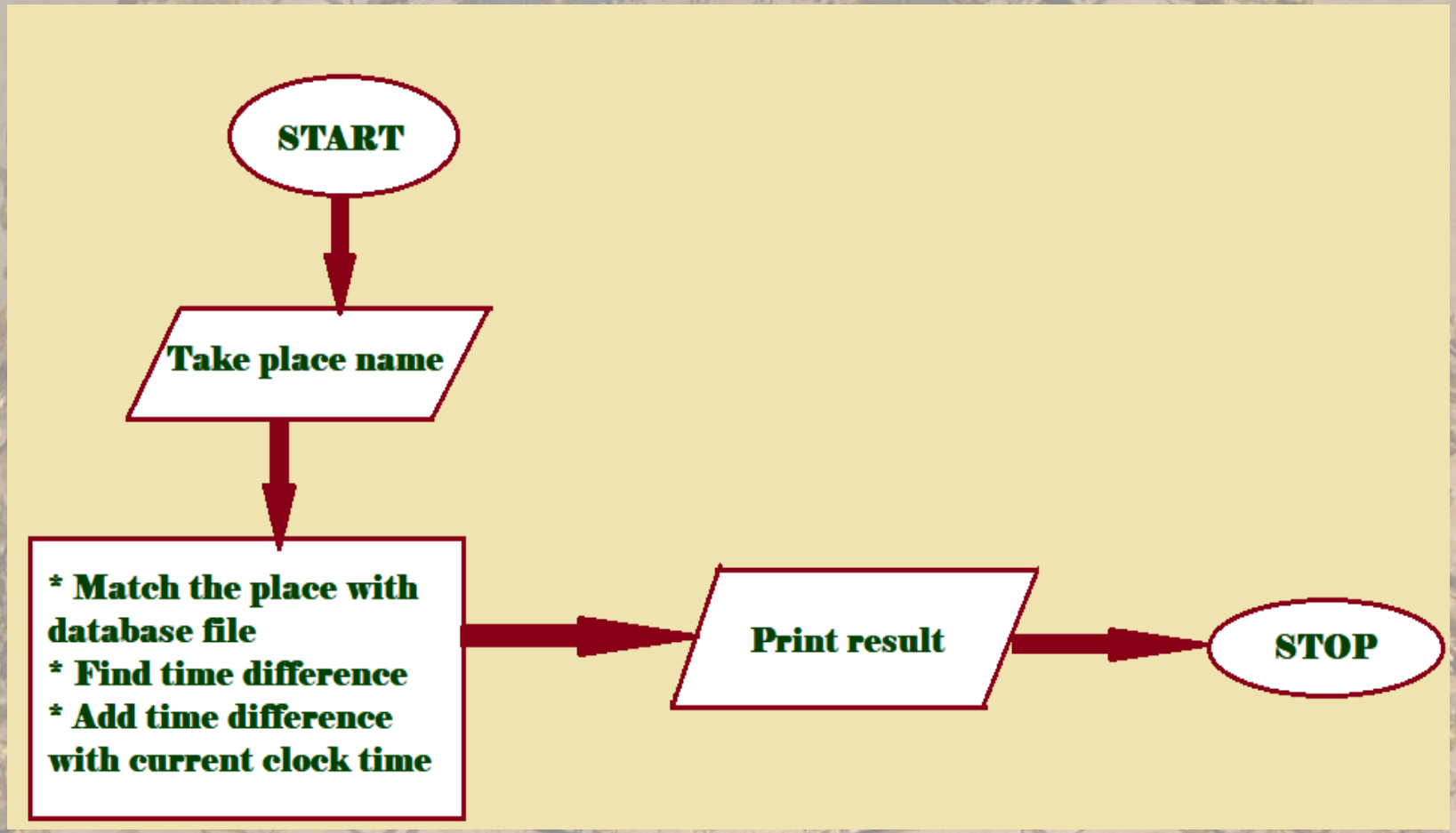


Time Converter

Functionalities:

- *Connect to a dataset of Place and time difference*
- *Follow GMT time convention*
- *Access to the current clock reading*
- *Read the output "Current time in [place] is [converted time]."*

Flow Chart of Time Converter




Thank
YOU!

Question