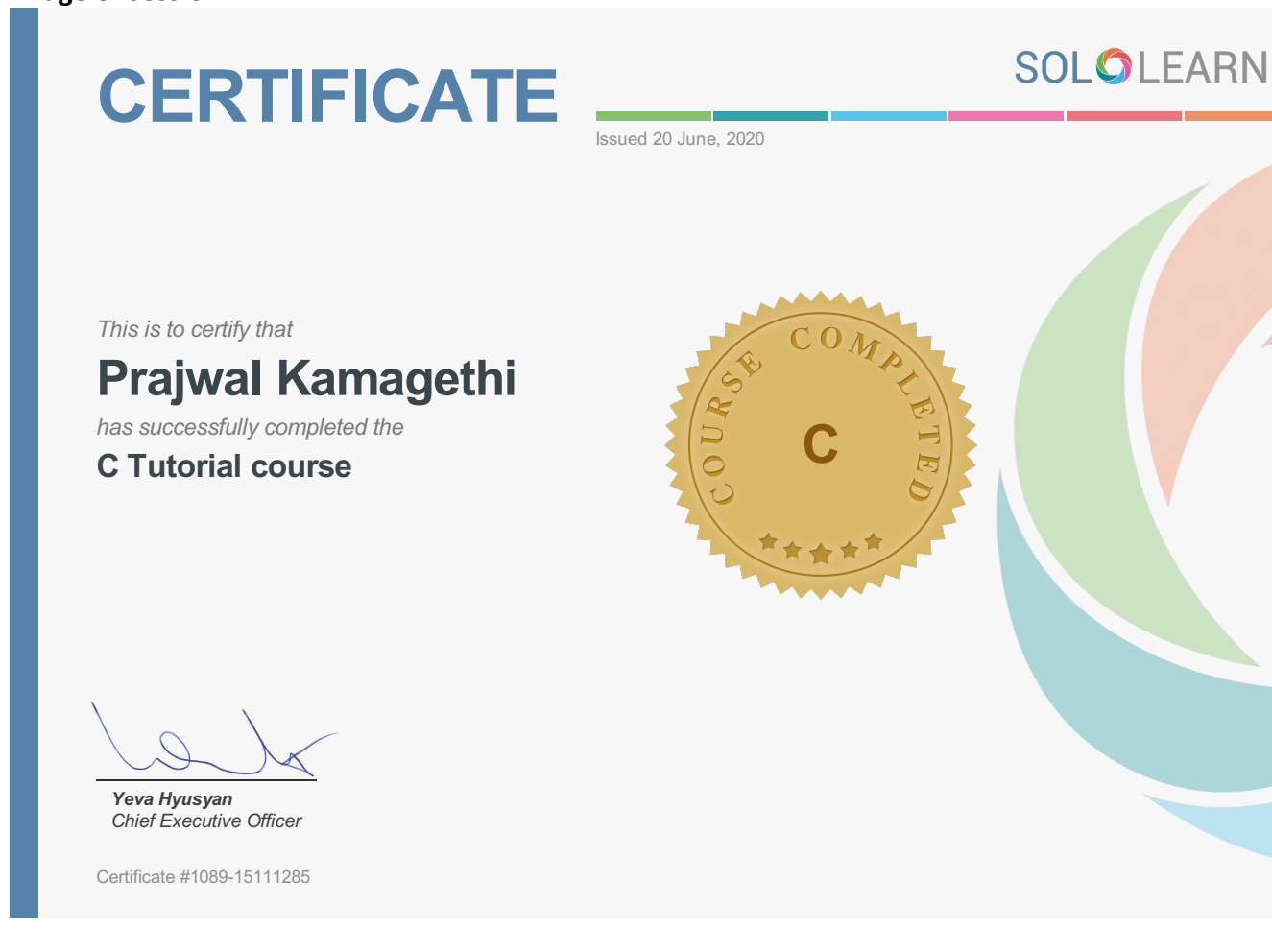


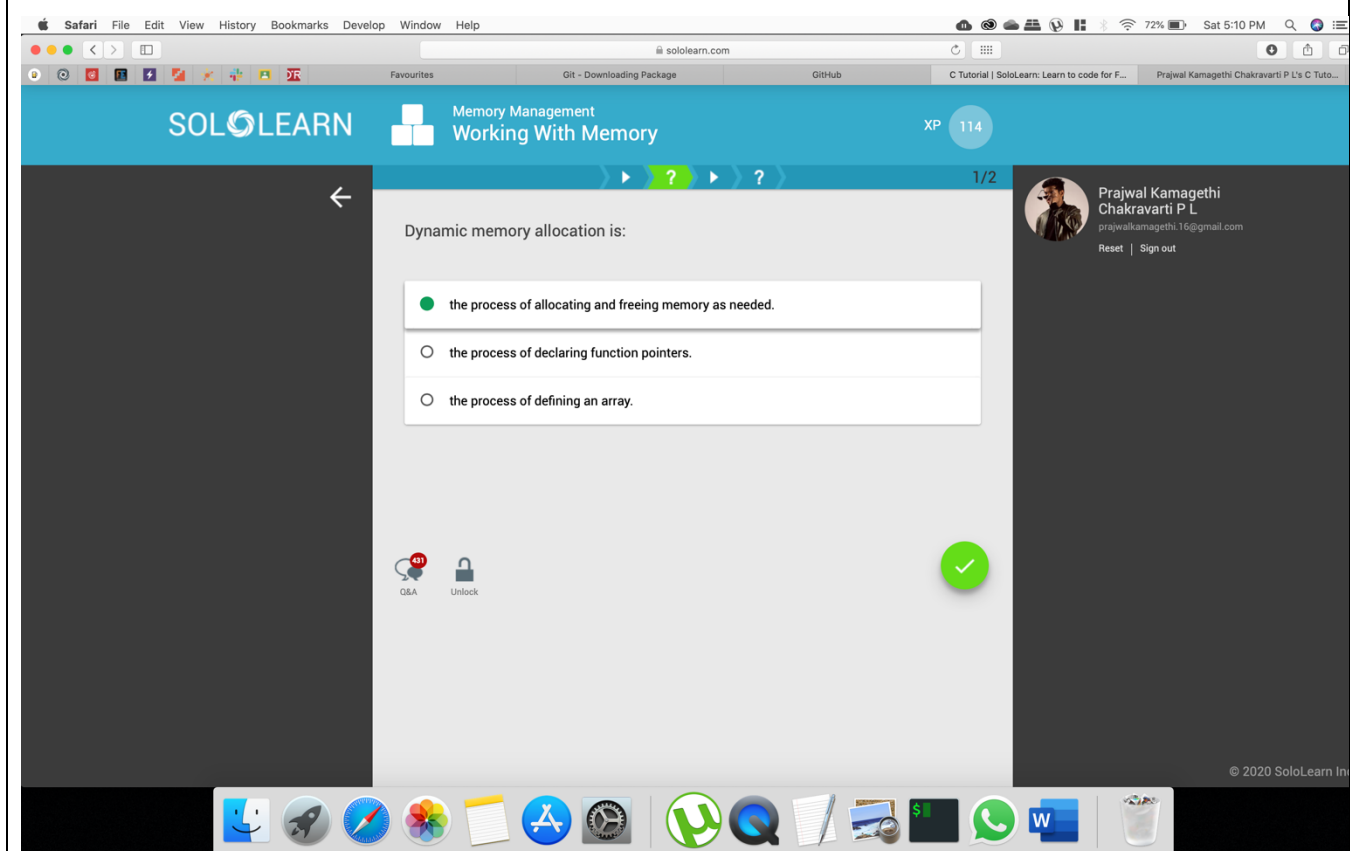
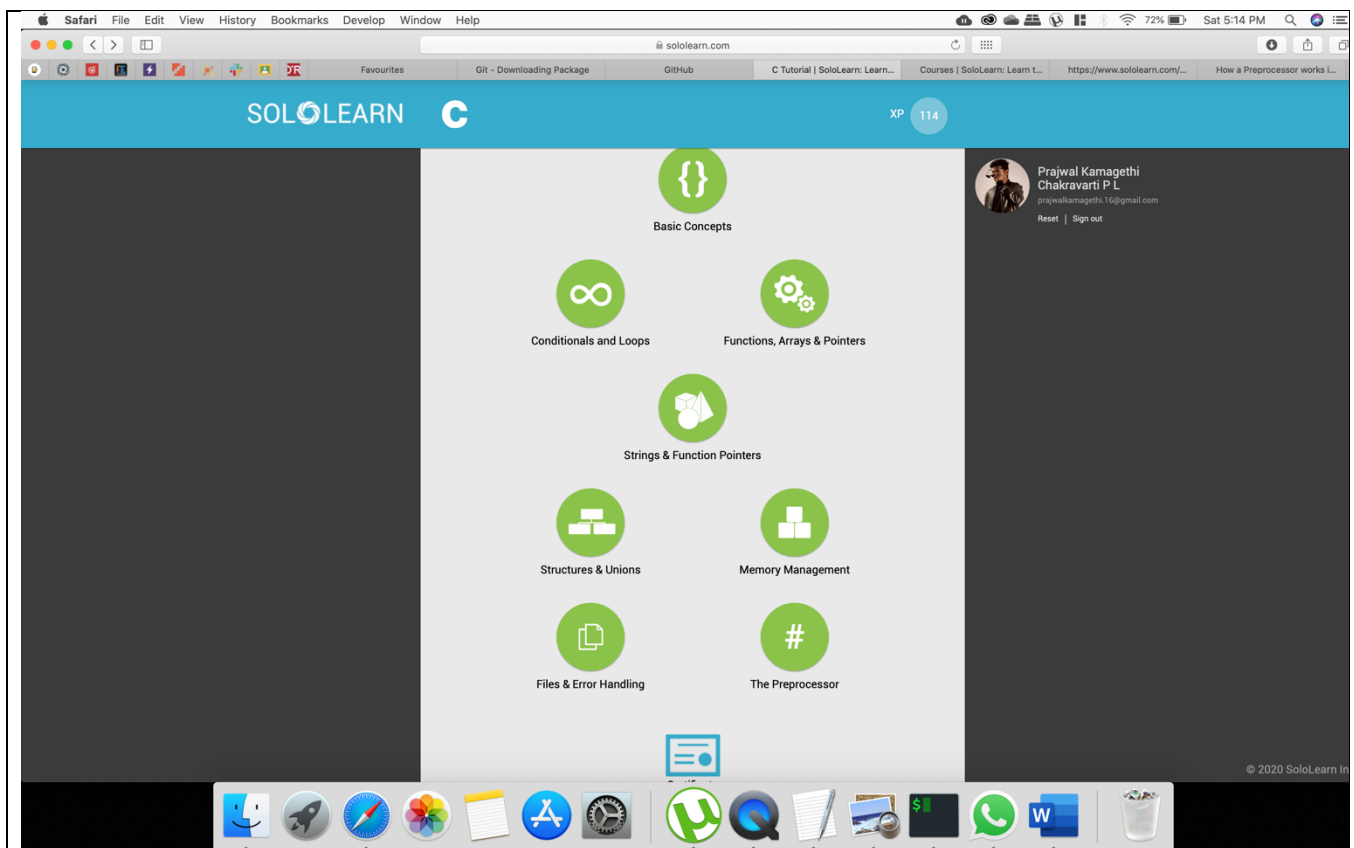
### DAILY ASSESSMENT

Date:	20-06-2020	Name:	Prajwal Kamageethi Chakravarti P L
Course:	C Programming	USN:	4AL17EC073
Topic:	Files & Error Handling The Preprocessor	Semester & Section:	6 <sup>th</sup> & B
GitHub Repository:	<a href="https://www.github.com/alvas-education-foundation/Prajwal-Kamageethi.git">https://www.github.com/alvas-education-foundation/Prajwal-Kamageethi.git</a>		

### FORENOON SESSION DETAILS

Image of session



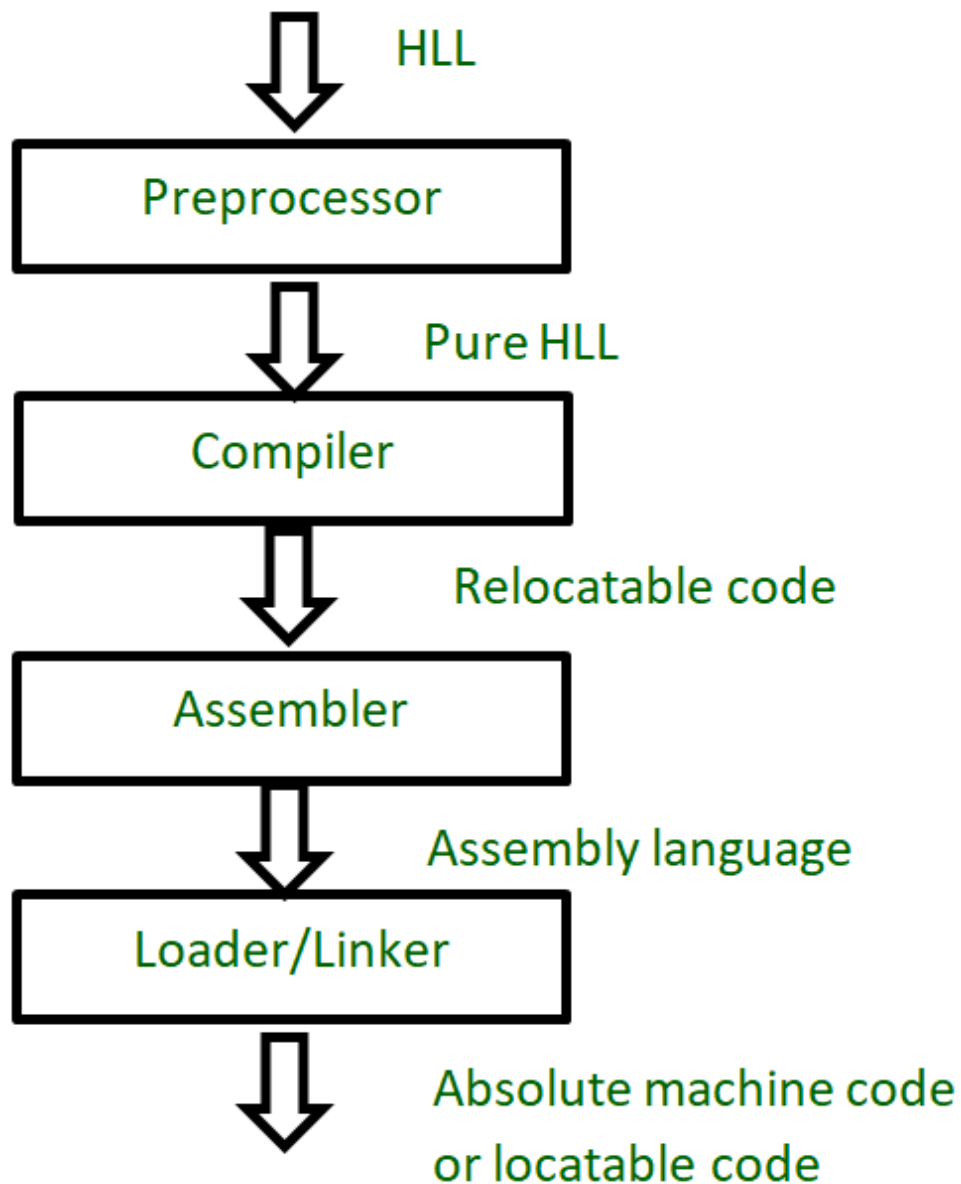


Report –

## How a Preprocessor works in C?

A Preprocessor is a system software (a computer program that is designed to run on computer's hardware and application programs). It performs preprocessing of the High Level Language(HLL). Preprocessing is the first step of the language processing system. Language processing system translates the high level language to machine level language or absolute machine code(i.e. to the form that can be understood by machine).

- The preprocessor doesn't know about the scope rules of C. Preprocessor directives like `#define` come into effect as soon as they are seen and remain in effect until the end of the file that contains them; the program's block structure is irrelevant.



### Error Handling

Error handling features are not supported by C programming, which is known as exception handling in C++ or in other OOP (Object Oriented Programming) languages. However, there are few methods and variables available in C's header file `error.h` that is used to locate errors using return values of the function call. In C, the function return `NULL` or `-1` value in case of any error, and there is a global variable `errno` which sets the error code/number. Hence, the return value can be used to check error while programming.

```
/* Divided By zero Error i.e. Exception */#include <stdio.h>
#include <stdlib.h>
```

```
void main() {
    int ddend = 60;
    int dsor = 0;
    int q;

    if( dsor == 0){
        fprintf(stderr, "Division by zero! Exiting...\n");
        getch();
        exit(-1);
    }
    q = ddend / dsor;
    fprintf(stderr, "Value of quotient : %d\n", q);
    getch();
    exit(0);
}
```

### File Handling in C

So far the operations using C program are done on a prompt / terminal which is not stored anywhere. But in the software industry, most of the programs are written to store the information fetched from the program. One such way is to store the fetched information in a file. Different operations that can be performed on a file are:

1. Creation of a new file (fopen with attributes as "a" or "a+" or "w" or "w++")
2. Opening an existing file (fopen)
3. Reading from file (fscanf or fgets)
4. Writing to a file (fprintf or fputs)
5. Moving to a specific location in a file (fseek, rewind)
6. Closing a file (fclose)

