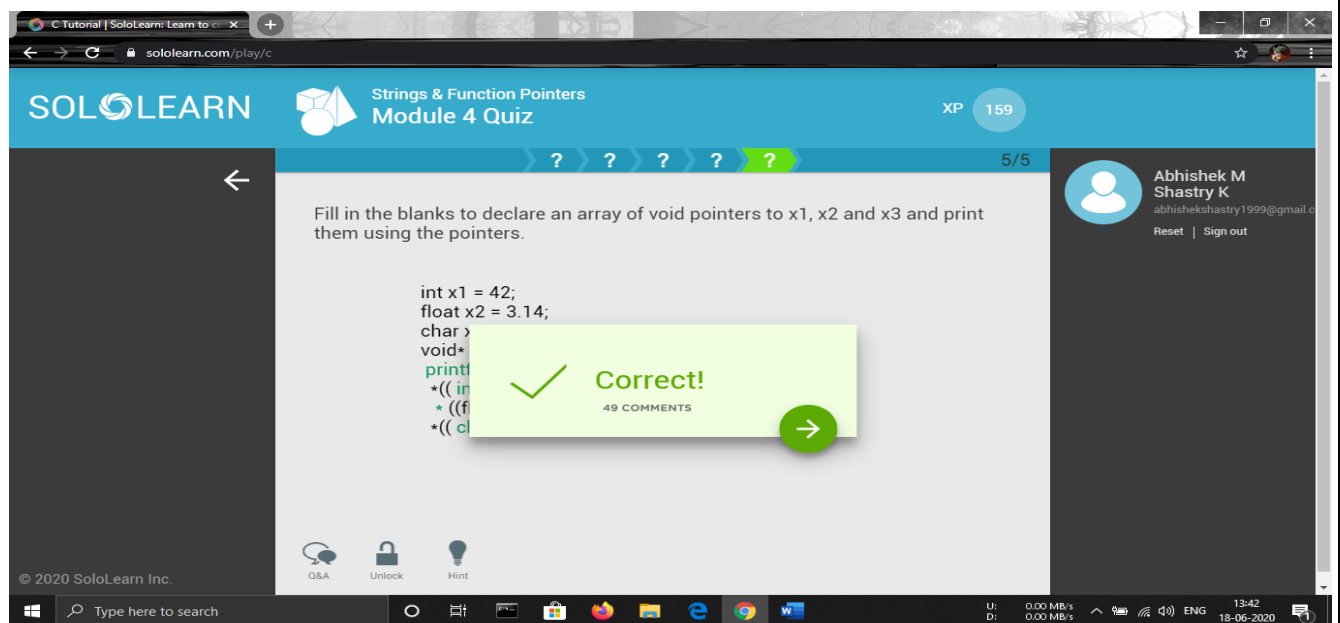
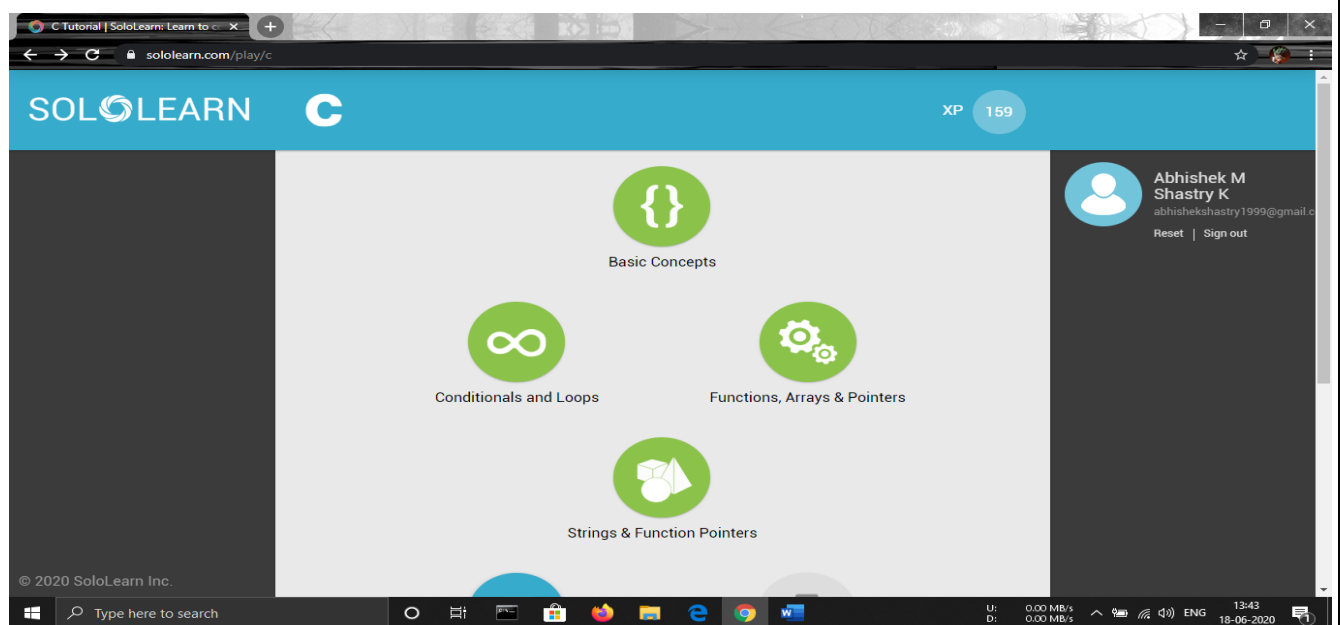


DAILY ASSESSMENT REPORT

Date:	18/06/2020	Name:	Abhishek M Shastry K
Course:	C Tutorial by SOLOLEARN	USN:	4AL17EC002
Topic:	1] Functions, Arrays & Pointers 2] Strings & Function Pointers	Semester & Section:	6 th 'A'
Github Repository:	AbhishekShastry-Courses		

FORENOON SESSION DETAILS

Image of session



Report

Functions, Arrays & Pointers

- Functions are central to C programming and are used to accomplish a program solution as a series of subtasks.
- A function:
 - ✓ Is a block of code that performs a specific task.
 - ✓ Is reusable.
 - ✓ Makes a program easier to test.
 - ✓ Can be modified without changing the calling program.
- When the parameter types and names are included in a declaration, the declaration is called a **function prototype**.
- A function's parameters are used to receive values required by the function. Values are passed to these parameters as arguments through the function call.
- By default, arguments are passed by value, which means that a copy of data is given to the parameters of the called function. The actual variable isn't passed into the function, so it won't change.
- An **array** is a data structure that stores a collection of related values that are all the same type. Arrays are useful because they can represent related data with one descriptive name rather than using separate variables that each must be named uniquely. For example, the array `test_scores[25]` can hold 25 test scores.
- An **array** declaration includes the type of the values it stores, an identifier, and square brackets `[]` with a number that indicates the array size. The contents of an array are called elements with each element accessible by an index number. In C, index numbers start at 0.
- **Pointers** are very important in C programming because they allow you to easily work with memory locations. They are fundamental to arrays, strings, and other data structures and algorithms.
- A **pointer** is a variable that contains the address of another variable. In other words, it "points" to the location assigned to a variable and can indirectly access the variable.
- An **array** cannot be passed by value to a function. However, an array name is a pointer, so just passing an array name to a function is passing a pointer to the array.

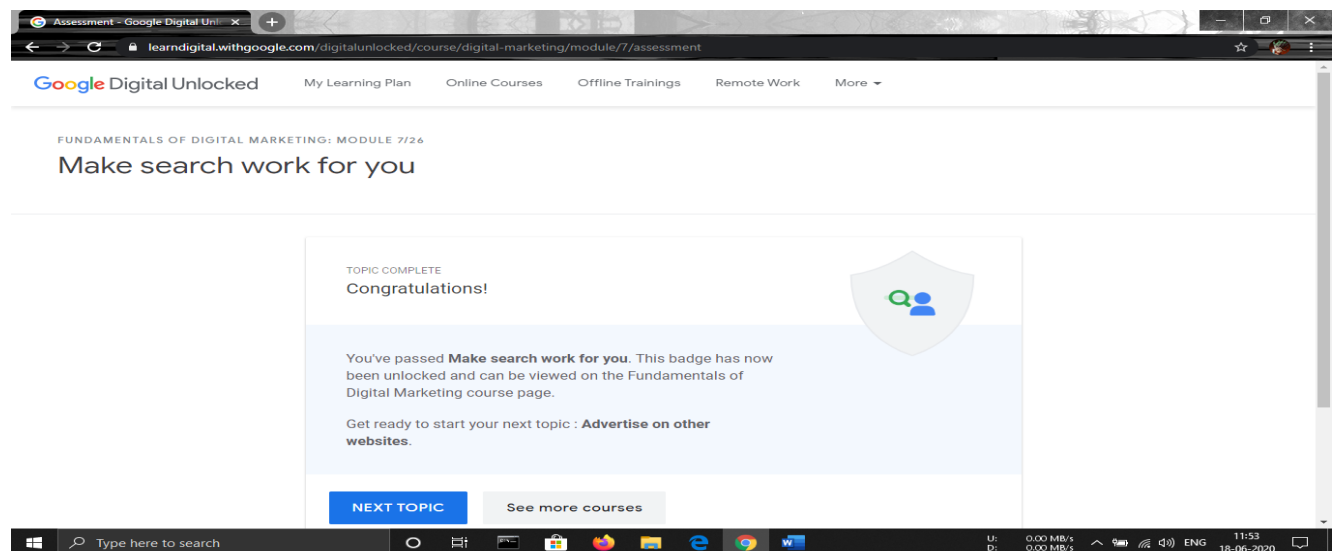
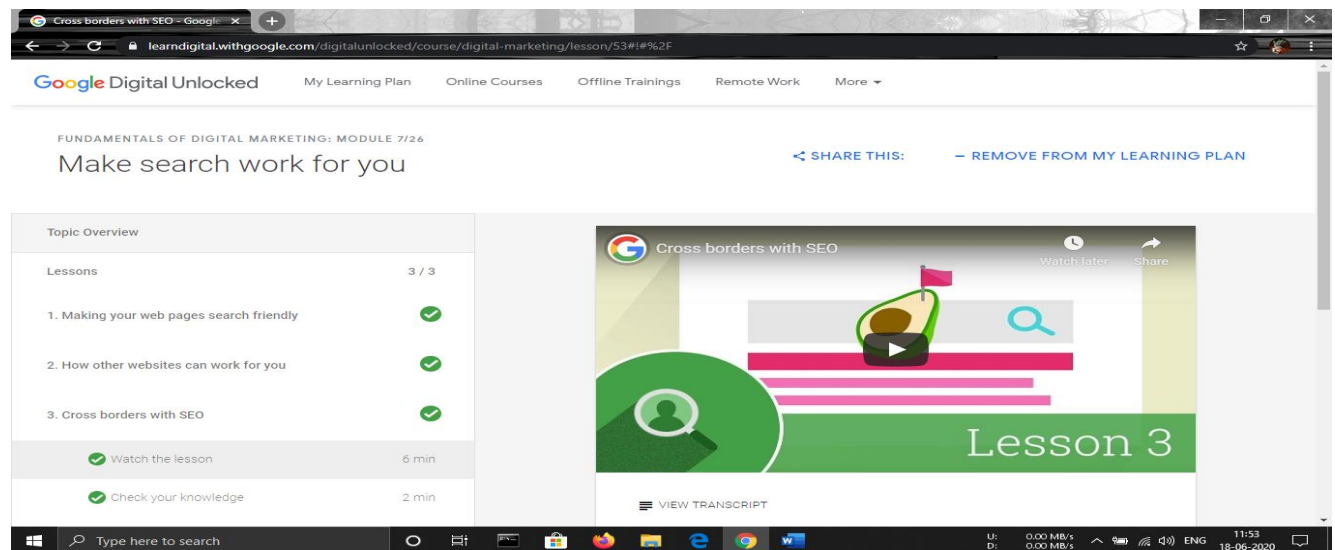
Strings & Function Pointers

- A string in C is an array of characters that ends with a NULL character '\0'.
- A string declaration can be made in several ways, each with its own considerations.
- Programs are often interactive, asking the user for input.
- To retrieve a line of text or other string from the user, C provides the `scanf()`, `gets()`, and `fgets()` functions.
- String output is handled with the `fputs()`, `puts()`, and `printf()` functions.
- The **`fputs()`** requires the name of the string and a pointer to where you want to print the string. To print to the screen, use `stdout` which refers to the standard output.
- A formatted string can be created with the `sprintf()` function. This is useful for building a string from other data types.
- The **`string.h`** library contains numerous string functions.
- The statement **`#include <string.h>`** at the top of your program gives you access to the following:
 - ✓ **`strlen(str)`** Returns the length of the string stored in `str`.
 - ✓ **`strcat(str1, str2)`** Appends (concatenates) `str2` to the end of `str1` and returns a pointer to `str1`.
 - ✓ **`strcpy(str1, str2)`** Copies `str2` to `str1`.
- The **`stdio.h`** library contains the following functions for converting a string to a number:
 - ✓ **`int atoi(str)`** Stands for ASCII to integer. Converts `str` to the equivalent `int` value. 0 is returned if the first character is not a number or no numbers are encountered.
 - ✓ **`double atof(str)`** Stands for ASCII to float. Converts `str` to the equivalent `double` value. 0.0 is returned if the first character is not a number or no numbers are encountered.
 - ✓ **`long int atol(str)`** Stands for ASCII to long int. Converts `str` to the equivalent long integer value. 0 is returned if the first character is not a number.
- Pointers to functions, or function pointers, point to executable code for a function in memory. Function pointers can be stored in an array or passed as arguments to other functions.
- A void pointer is used to refer to any address type in memory and has a declaration that looks like: **`void *ptr;`**
- A function pointer used as an argument is sometimes referred to as a **callback function**. The **`qsort()`** function in the `stdlib.h` header file uses this technique.

Date:	18/06/2020	Name:	Abhishek M Shastry K
Course:	Google Digital Unlocked: Fundamentals of digital marketing	USN:	4AL17EC002
Topic:	1] Make search work for you <ul style="list-style-type: none"> • Making your web pages search friendly • How other websites can work for you • Cross borders with SEO 	Semester & Section:	6th 'A'
Github Repository:	AbhishekShastry-Courses		

AFTERNOON SESSION DETAILS

Image of session



Report

Making your web pages search friendly

- There are several elements on your page that can tell the search engine that the page is about fresh fruits and vegetables. These include: meta tags and title, headings and the page copy itself.
- These aren't something you would see on a web page unless you were looking at its code. They're embedded messages that help the search engine determine what's on the page. In particular, there's the title and the meta description.
- The title and meta description are important because they both are used by the search engine to generate the actual search result for the specific page. The title is used to generate the first line shown; the meta description is used to generate the few short sentences that follow.
- A good meta description is usually two short sentences. It should also reinforce the title by using the keyword or phrase again. A good description would be: "Blake's Produce delivers organic fresh fruit & veg to your home, as often as you need it. Order your customizable box online."
- No matter where search engines look, they'll see consistent and clear information about what's on the page. And that might help improve your search engine rankings.

How other websites can work for you

- Your search engine optimization, or SEO results are influenced by things you do on your site and things that happen off your site. The latter involves what other sites are saying about yours. Two of your best chances to control this are backlinks and social media.
- Search engines caught onto this and responded by giving less value to sites that tried to manipulate the search results, which resulted in a drop in their search ranking.
- Search engines will crawl any page they can access, including social media sites. But they generally don't place special significance on your popularity within a social media site. For example, you won't get more credit for having more "likes" or "followers."
- But using social media is still a great way to reach a bigger audience. It promotes your site and your business because it helps people discover your content and encourages them to interact with you.

- The best way to support off-site optimization is by creating good content that establishes your site as a quality resource, attracting visitors who then share it across social media.

Cross borders with SEO

- There are some SEO guidelines for websites that offer content in multiple languages. The first is to make sure that each page in a different language has its own unique web page.
- Web design technology makes it possible to have English language content on a web page, say www.example.com/avocado.html, but allow visitors to click a button to view the same page written in French. The problem is that humans can click that button, but search engines can't.
- A better approach is to separate each translated version on its own web page. In this example, it would be much better to place the French version on its own page, with a separate URL: www.example.com/avocat.html.
- When half your content is in French and the other half is in English, search engines can't decide what language your content is in. It's better to use different pages for different languages.
- Avoid using automated services to translate your content.
- If you've taken the time to translate content, some search engines allow you to add language annotations to your web pages. These annotations help search engines serve the right content to the right person based on his or her country or language.
- Search engines may use a number of factors including where your website is hosted, its IP address, and information on your web pages. You can still help your site and its content be more visible to international prospects by using country targeting tools such as those found in Google Search Console.
- As you start promoting your website in other countries, keep three things in mind: language, localization and country targeting.
- If you do, you can adjust your website and SEO strategy to make your website an international success.