**DAILY ASSESSMENT FORMAT**

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| **Date:** | **23-06-2020** | **Name:** | **Dhanya Shetty** |
| **Course:** | **C PROGRAMMING** | **USN:** | **4AL17EC026** |
| **Topic:** | **1.DATATYPES, ARRAYS, POINTERS**  **2.FUNCTIONS** | **Semester & Section:** | **6th A** |
| **Github Repository:** | **Dhanya Shetty\_026** |  |  |

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| **FORENOON SESSION DETAILS** |
| C:\Users\Hp\Desktop\report\23june111.PNG  C:\Users\Hp\Desktop\report\23june222.PNG  **C:\Users\Hp\Desktop\report\23june333.PNG**  **C:\Users\Hp\Desktop\report\23june444.PNG**  **C Programming :**  **C** is highly portable and is **used for** scripting system applications which form a major part of Windows, UNIX, and Linux operating system. **C** is a general-purpose **programming language** and can efficiently work on enterprise applications, games, graphics, and applications requiring calculations, etc.  **Arrays :**  **Arrays** a kind of data structure that can store a fixed-size sequential collection of elements of the same type. An **array** is used to store a collection of data.  **Whats is an array?**  An arrangement of objects, pictures, or numbers in columns and rows is called an **array**. **Arrays** are useful representations of multiplication concepts. This **array** has 4 rows and 3 columns. It can also be described as a 4 by 3 **array**. ... When equal groups are arranged in equal rows, an **array** is formed.  Computer **Programming** - **Arrays**. ... An **array** is a data structure, which can store a fixed-size collection of elements of the same data type. An **array** is used to store a collection of data, but it is often more useful to think of an **array** as a collection of variables of the same type.  **Pointer in C programming :**  A **pointer** is a variable whose value is the address of another variable, i.e., direct address of the memory location. Like any variable or constant, you must declare a **pointer** before using it to store any variable address.  **What is pointer in C with example?**  A **pointer** is a variable that stores the address of another variable. Unlike other variables that hold values of a certain type, **pointer** holds the address of a variable. For **example**, an integer variable holds (or you can say stores) an integer value, however an integer **pointer** holds the address of a integer variable.  **List Of Pointers In C Programming :**   * Null Pointer. NULL Pointer is a pointer which is pointing to nothing. ... * Dangling Pointer * Generic Pointers * Wild Pointer * Complex Pointers * Near Pointer * Far Pointer * Huge Pointer   **What is difference between character array and string in C?**  The **difference between** just an **array** of **characters** and a **string in C** is the addition of a NULL **character** (\0) at the end. ... **Strings** can be declared using the same method used to specify values **in a character array** or we can use a shortcut by including a **string** in double quotes.  **Functions :**  **There are two types of functions in C programming:**   * Library **Functions**: are the **functions** which are declared in the **C** header files such as scanf(), printf(), gets(), puts(), ceil(), floor() etc. * User-defined **functions**: are the **functions** which are created by the **C programmer**, so that he/she can use it many times.   **There can be 4 different types of user-defined functions, they are:**   * Function with no arguments and no return value. * Function with no arguments and a return value. * Function with arguments and no return value. * Function with arguments and a return value.   **Functions** are used for Placing or Storing the Code which is to be Repeated Several Times. For **Example**, if we need Same Code, then we must have to Write that Code Again and Again So that for Removing this Task, we uses **functions**.  **Advantages of Function :**  Avoid repetition of codes. Increases program readability. Divide a complex problem into simpler ones. Reduces chances of error.  **Datatypes :**  In the [C programming language](https://en.wikipedia.org/wiki/C_(programming_language)), **data types** constitute the semantics and characteristics of storage of data elements. They are expressed in the language syntax in form of declarations for [memory locations](https://en.wikipedia.org/wiki/Memory_address) or [variables](https://en.wikipedia.org/wiki/Variable_(computer_science)). Data types also determine the types of operations or methods of processing of data elements.  The C language provides basic arithmetic types, such as [integer](https://en.wikipedia.org/wiki/Integer) and [real number](https://en.wikipedia.org/wiki/Real_number) types, and syntax to build array and compound types. *Headers* for the [C standard library](https://en.wikipedia.org/wiki/C_standard_library), to be used via [include directives](https://en.wikipedia.org/wiki/Include_directive), contain definitions of support types that have additional properties, such as providing storage with an exact size, independent of the language implementation on specific hardware platforms.  Data Types in C   |  |  |  | | --- | --- | --- | | **Data Type** | **Memory (bytes)** | **Format Specifier** | | signed **char** | 1 | %c | | unsigned **char** | 1 | %c | | **float** | 4 | %f | | double | 8 | %lf |   **Data types in C Language**   * Primary data types: These are fundamental data types in C namely integer( int ), floating point( float ), character( char ) and void . * Derived data types: Derived data types are nothing but primary datatypes but a little twisted or grouped together like array, stucture, union and pointer.   What is data type and their types  **Data Type**. A **data type** is a **type** of **data**.... Some common **data types** include integers, floating point numbers, characters, strings, and arrays. They may also be more specific **types**, such as dates, timestamps, boolean values, and varchar (**variable** character) formats.  **Webinar on “TREND IN IT DOMAIN” hosted by Rahul Shettigar on Monday, June 22, 2020**  C:\Users\Hp\Desktop\report\Screenshot_20200622-163343_Zoom.jpg  C:\Users\Hp\Desktop\report\Screenshot_20200622-165423_Zoom.jpg |

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