**DAILY ASSESSMENT FORMAT**

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| **Date:** | **22/06/2020** | **Name:** | **Lavanya B** |
| **Course:** | **C++ programming** | **USN:** | **4al17ec043** |
| **Topic:** | **Basic concrpts**  **Conditionals and loops**  **Data types,arrays, pointers** | **Semester & Section:** | **6th A** |
| **Github Repository:** | **Lavanya-B** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report**  **C++ programming**  **C++ is a general-purpose programming language.**  **C++ is used to create computer programs. Anything from art applications, music players and even video games.**  **Eg: #include <iostream>**  **using namespace std;**  **int main()**  **{**  **cout << "Hello world!";**  **return 0;**  **}**  **Comments**  **Comments are explanatory statements that you can include in the C++ code to explain what the code is doing.**  **The compiler ignores everything that appears in the comment, so none of that information shows in the result.**  **A comment beginning with two slashes (//) is called a single-line comment. The slashes tell the compiler to ignore everything that follows, until the end of the line.**  **Variables**  **Creating a variable reserves a memory location, or a space in memory for storing values. The compiler requires that you provide a data type for each variable you declare.**  **C++ offer a rich assortment of built-in as well as user defined data types.**  **Integer, a built-in type, represents a whole number value. Define integer using the keyword int.**  **C++ requires that you specify the type and the identifier for each variable defined.**  **An identifier is a name for a variable, function, class, module, or any other user-defined item. An identifier starts with a letter (A-Z or a-z) or an underscore (\_), followed by additional letters, underscores, and digits (0 to 9).**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int a = 30;**  **int b = 12;**  **int sum = a + b;**  **cout << sum;**  **return 0;**  **}**  **Arithematic operators**    **Conditional loops**  **The if statement is used to execute some code if a condition is true.**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int a = 55;**  **int b = 33;**  **if (a > b) {**  **cout << "a is greater than b";**  **}**  **return 0;**  **}**  **Else statement**  **An if statement can be followed by an optional else statement, which executes when the condition is false.**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int mark = 100;**  **if (mark >= 50) {**  **cout << "You passed." << endl;**  **if (mark == 100) {**  **cout <<"Perfect!" << endl;**  **}**  **}**  **else {**  **cout << "You failed." << endl;**  **}**  **return 0;**  **}**  **While loop**  **A loop repeatedly executes a set of statements until a particular condition is satisfied.**  **A while loop statement repeatedly executes a target statement as long as a given condition remains true.**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int num = 1;**  **while (num < 6) {**  **cout << "Number: " << num << endl;**  **num = num + 3;**  **}**  **return 0;**  **}**  **For loop**  **A for loop is a repetition control structure that allows you to efficiently write a loop that executes a specific number of times.**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **for (int a = 10; a >= 0; a -= 3) {**  **cout << a << endl;**  **}**  **return 0;**  **}**  **Switch case**  **Sometimes there is a need to test a variable for equality against multiple values. That can be achieved using multiple if statements. The switch statement tests a variable against a list of values, which are called cases, to determine whether it is equal to any of them.**  **Eg:**  **#include <iostream>**  **using namespace std;**  **int main()**  **{**  **int age = 25;**  **switch (age) {**  **case 16:**  **cout << "Too young";**  **break;**  **case 42:**  **cout << "Adult";**  **break;**  **case 70:**  **cout << "Senior";**  **break;**  **default:**  **cout << "This is the default case";**  **}**  **return 0;**  **}**  **Logical operator** |