**DAILY ASSESSMENT FORMAT**

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| **Date:** | **09/06/2020** | **Name:** | **Lavanya B** |
| **Course:** | **Kicad** | **USN:** | **4al17ec043** |
| **Topic:** | **Start new project**  **Netlist and footprint** | **Semester & Section:** | **6th A** |
| **Github Repository:** | **Lavanya-B** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report**  **PCB designing**  **A Printed Circuit Boards is a rugged, copper and non-conductive substrate based structure to connect electrical components (for example the green board inside a common electrical appliance is a PCB). The PCB is the backbone of electrical devices, allowing you to connect passive (resistor, inductor, capacitors etc…), active and embedded devices together, into specific form factors to fit the design need. Connections between the components are made through copper connections which become passageways for electrical signals.**  **PCBs were first developed by an Austrian Engineer named Paul Eisler. Born in Vienna, and educated at the Vienna University, he made his way to the United Kingdom in the 1936. He began developing the circuit manufacturing process during the Second World War where he earned a number of patents dealing with the etching process, to define the various routes and electrical conduits on your board.**  **PCB design flow**   * **Part research and selection** * **Schematic capture and simulation** * **Board layout** * **Verification and validation**   **Getting started with PCB designing**  **A PCB typically consists of multiple layers of copper which are used to conduct a signal, with various layers of dielectric for insulation. The green color that one finds on most PCBs comes from a solder mask. A solder mask however can be found in either blue or red.**   1. **Board outline** 2. **Creating copper routes** 3. **Drilling holes** 4. **Components on a PCB design** 5. **Gerber file** |

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| **Date:** | **09/06/2020** | **Name:** | **Lavanya B** | |
| **Course:** | **Java** | **USN:** | **4al17ec043** | |
| **Topic:** | **Programming core JAVA** | **Semester & Section:** | **6th A** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report**  **Programming core JAVA**  **Hello word**  **class MyClass {**  **public static void main(String[ ] args) {**  **System.out.println("Hello World");**  **}**  **}**  **Variables**  **Variables store data for processing.**  **A variable is given a name or identifier, such as area, age, height. The name uniquely identifies each variable, assigning a value to the variable and retrieving the value stored.**  **Variables have types. Some examples:**   * **int: for integers (whole numbers) such as 123 and -456** * **double: for floating-point or real numbers with optional decimal points and fractional parts in fixed or scientific notations, such as 3.1416, -55.66.** * **String: for texts such as "Hello" or "Good Morning!". Text strings are enclosed within double quotes.**   **Eg:**  **class MyClass {**  **public static void main(String[ ] args) {**  **String name ="David";**  **int age = 42;**  **double score =15.9;**  **char group = 'Z';**  **}**  **}**  **Strings**  **A String is an object that represents a sequence of characters.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **String myname;**  **myname = "Lavanya";**      **System.out.println("My name is " + myname );**  **}**  **}**  **While loop**  **A loop statement allows to repeatedly execute a statement or group of statements.**  **A while loop statement repeatedly executes a target statement as long as a given condition is true.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **int x = 3;**  **while(x > 0) {**  **System.out.println(x);**  **x--;**  **}**  **}**  **}**  **For loop**  **A for loop allows you to efficiently write a loop that needs to execute a specific number of times.**  **Syntax:**  **for (initialization; condition; increment/decrement) {**  **statement(s)**  **}**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **for(int x = 1; x <=5; x++) {**  **System.out.println(x);**  **}**  **}**  **}**  **if loop**  **if statement's condition expression evaluates to true, the block of code inside the if statement is executed. If the expression is found to be false, the first set of code after the end of the if statement is executed.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **int x = 7;**  **if(x < 42) {**  **System.out.println("Hi");**  **}**  **}**  **}**  **else if**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **int age = 25;**  **if(age <= 0) {**  **System.out.println("Error");**  **} else if(age <= 16) {**  **System.out.println("Too Young");**  **} else if(age < 100) {**  **System.out.println("Welcome!");**  **} else {**  **System.out.println("Really?");**  **}**  **}**  **}**  **Getting user input**  **the Scanner object is the most common, and perhaps the easiest to implement. Import the Scanner class to use the Scanner object**  **Read a byte - nextByte()**  **Read a short - nextShort()**  **Read an int - nextInt()**  **Read a long - nextLong()**  **Read a float - nextFloat()**  **Read a double - nextDouble()**  **Read a boolean - nextBoolean()**  **Read a complete line - nextLine()**  **Read a word - next()**  **Eg:**  **import java.util.Scanner;**  **class MyClass {**  **public static void main(String[ ] args) {**  **Scanner myVar = new Scanner(System.in);**  **System.out.println(myVar.nextLine());**  **}**  **}**  **Do while loop**  **do while loop is guaranteed to execute at least one time.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **int x = 1;**  **do {**  **System.out.println(x);**  **x++;**  **} while(x < 0);**  **}**  **}**  **Switch**  **A switch statement tests a variable for equality against a list of values. Each value is called a case, and the variable being switched on is checked for each case.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **int day = 3;**  **switch(day) {**  **case 1:**  **System.out.println("Monday");**  **break;**  **case 2:**  **System.out.println("Tuesday");**  **break;**  **case 3:**  **System.out.println("Wednesday");**  **break;**  **}**  **}**  **}**  **Arrays**  **An array is a collection of variables of the same type.**  **When you need to store a list of values, such as numbers, you can store them in an array, instead of declaring separate variables for each number.**  **Eg:**  **public class Program {**  **public static void main(String[] args) {**  **String[ ] myNames = { "A", "B", "C", "D"};**  **System.out.println(myNames[2]);**  **}**  **}** | | | |