**Orientation**

[Udemy](https://www.udemy.com/) **UserID:  contact@miit.tech**

**Password:Tech@6448**

**HTML CSS and JAva script**

<https://www.udemy.com/share/101MCF3@705bj3C5pFiPlt7xvLLORIPVo4aAX2MmQhF2ELBZqGAcqpe4pgJj9wFKCZDMtX7FCQ==/>

Section number 2

<https://www.w3schools.com/html/default.asp>

* HTML : first and second topic (HTML forms must)
* CSS initial 5 ot 6 sub topic
* Java script : first section

**Java**

* [Java Tutorial | Learn Java Programming - javatpoint](https://www.javatpoint.com/java-tutorial)
* Please try to complete till Java String
* Expectation is that in Orientation Video and try to make 100 up programs

**SQL**

<https://www.udemy.com/share/101Wiw3@UGxC1bf3K0ZhgwNF9FmK2lFM-7UGdbGbaYiSeRpr3XGWhEog1J6OhwlsVqCKmV-A8w==/>

<https://www.w3schools.com/html/default.asp>

SQL Second topic : till constraint (till foreigh key) + first section select insert update and delete

**Software installation list with link**

**Java 11:**

<https://www.oracle.com/ca-en/java/technologies/javase/jdk11-archive-downloads.html>

**Eclipse:**

[**https://www.eclipse.org/downloads/packages/release/kepler/sr1/eclipse-ide-java-developers**](https://www.eclipse.org/downloads/packages/release/kepler/sr1/eclipse-ide-java-developers)

**MySQL workbench:**

<https://www.youtube.com/watch?v=OM4aZJW_Ojs>

https://www.mysqltutorial.org/install-mysql/

**Ubuntu desktop :** <https://www.microsoft.com/enca/p/ubuntu/9nblggh4msv6?activetab=pivot:overviewtab>

**Postman:**

[**https://www.postman.com/downloads/**](https://www.postman.com/downloads/)

**Git bash:**

[**https://git-scm.com/downloads**](https://git-scm.com/downloads)

**Docker:**

[**https://www.docker.com/pricing/?utm\_source=google&utm\_medium=cpc&utm\_campaign=search\_na\_brand&utm\_term=Docker\_desktop\_exact&gclid=CjwKCAiA68ebBhB-EiwALVC-Nk7kgFdRG-RXY9QyIfaZlzKrX5-dhgI7d5Dy-B8B17eUqA4EG\_khDhoCAZsQAvD\_BwE**](https://www.docker.com/pricing/?utm_source=google&utm_medium=cpc&utm_campaign=search_na_brand&utm_term=Docker_desktop_exact&gclid=CjwKCAiA68ebBhB-EiwALVC-Nk7kgFdRG-RXY9QyIfaZlzKrX5-dhgI7d5Dy-B8B17eUqA4EG_khDhoCAZsQAvD_BwE)

**Plural Sight: https://app.pluralsight.com/id**

**Username: support@miit.tech**

**Password: Tech@6448**

**Note:**

* **Expectation is that student has started practice according to the orientation**
* **Java programms 100 +**
* **SQL queries 100+**
* **if Student has any issue with setting up in java please attend the support sessions.**

1. **Introduction**

* Introduction
* What is the Role and responsibilities of the Developer
* Basic updates from the orientation session as we have given assignments to all the students
* Make sure all the software have been set up including java
* Start with HTML, CSS and Java script
* Explain html forms with some java script

**Assignment**: Create on Bio page with HTML, Css and Java script

1. **Project creation and Maven**

* Java project through command line
* Java project in eclipse
* What is Maven
  + <https://maven.apache.org/guides/getting-started/maven-in-five-minutes.html>
  + <http://people.apache.org/~jvanzyl/maven-3.1.1/guides/getting-started/maven-in-five-minutes.htm>
* Maven project through command line
* Incorporate dependency in Java project
* Maven project in eclipse
* Incorporate dependency in Maven Java project

**Assignments:**

* Create and run standalone Java files through command line
* Create a Maven project using some simple dependency
* Create Java and Maven Java project in IDE
* Setup the IDE and environment for work-space

1. **Introduction to java**

* What is Java, Java features
* JVM, JRE, JDK overview and differences
* Object, Class and Reference?
* Java variables (Instance, local and Static)
* Java data types
* Java operators and keywords
* Methods (Static and instance)and Constructor
* Control statements - if-else, switch, for-each, while

**Assignments:**

* Create Simple Calculator program (basic functions such as plus, minus, divide, multiplication)
* Make sure we have one main class and one other class for Calculator
  + It should take the input from the user like operations and then values
  + Program should not exit it should be in infinite loop kind of
  + Use scanner.in
  + Use case statement
  + Write down test case positive and negative

* Java Programs (<https://www.javatpoint.com/java-programs>)
* At Least 3-4 programs of each section
* Try to cover or at least read Java Object Class

1. **Git**

* If any topic left over from the past lecture
* Git installation
* Git commands and exercise through command line and Eclipse

1. **Database and SQL**

* What is Database explain little on RDBMS and Nosql but focus is around RDBMS
* MySQL basic queries through command line and workbench

1. **Junit**

* Going through individual doubts
* Tracked work progress individual
* Start with **Junit Test cases** and set up

**Assignments:**

Write Junit Test cases for the Calculator

1. **Conclusion**

* Any left over topics from the above.
* Please make sure that we have checked their assignments and they have create 100 + java programs at this stage
* Q&A and