

Day – 1 Home work for Lesson-1 and Lesson-2

Only Submit the tasks 3 and 4 Kotlin code in online.cs.miu.edu Assignments.

Convert all your Kotlin homework programs into one pdf file with the corresponding output and upload it or upload each Kotlin files(not a complete project). No need to use GitHub for this homework. Because of the IntelliJ IDEA useful for Lesson 2 Homework only. From Lesson 3 you are going to work with Android Studio only.

Perform the given tasks

1. Read Lesson -1
2. Practice Kotlin fundamentals discussed in Lesson 2 in the given below link
 - a. <https://try.kotlinlang.org/#/Examples/Hello,%20world!/Simplest%20version/Simplest%20version.kt>
 - b. Convert some Java code to Kotlin by clicking Convert from Java Tab
3. Try the following Kotlin code either try.Kotlinlang.org or install IntelliJ Idea from <https://www.jetbrains.com/idea> and click Download and select Community based on your OS.
 - a. Create a function to print the last digit and first digit of the given number
 - b. Write a function to find the sum of odd squared values in the given array of integers.
Example : { 1,2,3,4,6,5}
Output : $1 + 9 + 25 = 35$
 - c. Write a Program using **when** expression to find the weight of a person in various planets according to the choice of user input. Assume inputs in pounds. Do the Kotlin approach to avoid NullPointerException if the input is null.
Weight = Input * Relative gravity

Choice Planet Relative gravity

1	Venus	0.78
2	Mars	0.39
3	Jupiter	2.65
4	Saturn	1.17
5	Uranus	1.05
6	Neptune	1.23

4. Practice OO Concepts(Class, Object, Getters and Setters, Inheritance, Override etc.,

- a. Create a class Book with the fields title, author and price. Make a constructor which initialize all the fields. Add a behavior with read() and just print a message “Reading Paper book”.
 - b. Create a subclass EBook from Book, include additional attribute filetype as String. (ex: pdf, epub, kindle etc.,). Override read() method and print the message as “Read from Electronic Device”.
 - c. Write a Test class. Create object for Book and Ebook. Make use of getters and setters.
5. Install Android SDK in your own Machine from the given link. From Lesson 3 all apps are going to develop using only Android Studio
 - a. <https://developer.android.com/studio/install>