

# Learningescalator Java for Beginners Course

August 16-20, 2021

## **Course Objectives and Rationale:**

Welcome! This course is designed for students who have no experience or some experience with programming languages such as Scratch, Python, etc.

## **Learning Points:**

- Input and output
- Variables
- If/else statements
- Loops
  - o For loops and while loops
- Arrays
- Methods
- Classes (Object-oriented programming)
  - o Properties of object-oriented programming
  - o How Java implements object-oriented programming approach

## **Class Format:**

In this course, students will first be taught about the learning point with demonstrations and examples from the instructor. Students will then be given an exercise to practice that skill, as well as problems to solve by coding a program.

Optional homework will be assigned every day based on what we learned in class, and it is recommended for students to try it out. At the beginning of each class, we will spend around 15 minutes going through the homework from the previous day, so students are definitely welcome to share and present their solutions at this time.