

Lab Work #01

CPL102: Object-Oriented Programming

SS2024

These exercises will cover the concept of variables, data types, class definition, object creation, basic String usage and different data type conversion.

1. Write a Java program that prompts the user to enter their name and age, and then stores those values in variables. Print out a message that greets the user by name and tells them how many years they've been alive.
2. Write a Java program that declares two integer variables and assigns them values. Swap the values of the two variables without using a third variable.
3. Create a Java program that generates a random number between 1 and 100 and stores it in a variable. Then, prompt the user to guess the number and store their guess in a variable. If the user's guess is higher than the random number, print "Too high!" and if it's lower, print "Too low!" Keep prompting the user until they guess the correct number.
4. Write a Java program that prompts the user to enter a decimal number and stores it in a variable. Then, use type casting to convert the decimal number to an integer and store the integer in a second variable. Print out both variables to confirm the conversion was successful.
5. Write a Java program that declares the class data members for name, age and gender, and then stores the information for at least 3 students using class objects. Print out a message that greets the user by name, gender and tells them how old they are.