CSE 3302 Programming Languages

Homework 1 - Spring 2026

Due Date: Jan.19, 2026, 11:59 PM

Problem 1 - 20%

Give a feature of C, C++ or Java that illustrates *orthogonality*. Give a feature that illustrates *non-orthogonality*.

Problem 2 - 20%

Choose a programming language you are familiar with. List its basic data types with explanation.

Problem 3 - 25%

Write a Java function called *SpOdd*. The function takes an array of integers as input and return an array of integers with all odd numbers in original array. Keep the same order as the original array. Then test your function in main function.

Sample output of main function:

Original Array: [3, 8, 5, 7, 1, 9, 2]
Odd elements in the array: [3, 5, 7, 1, 9]

Please submit your .java file.

Problem 4 - 35%

We have learned the difference between compiler and interpreter. Now research compiled languages and interpreted languages. Then list the *advantages* and *disadvantages* of these two types of languages.

Submission Format: Submit one zip file via Canvas containing only the `.pdf` version of your homework (typed submissions are preferred; Scanned images must be readable) and the corresponding `.java` source file. The zip file must be named `lastname_studentID_hw1.zip`.