**Name: Session:**

**Programming II**

**Lab Exercise 4/9/2025**

1. Write a function that tests whether a string is a palindrome.
2. Write a program that prints the next 50 leap years. Is 2100 a leap year?
3. Write a function onAll that applies a function to every element of an array. Use it to modify each element to the square root of the number stored in the array element. You should initialize the array with a 1000 random integers with the values from 1 to 10000.
4. Write a function that takes a number and returns an array of its digits.
5. Write a function that is given a base 10 integer and returns a number of any user provided base from 2 to 16.

**Once you have competed your programs, submit your source code and a sample output.**