Solution 04-12-23

1455. Check If a Word Occurs As a Prefix of Any Word in a Sentence

```
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
import java.util.Scanner;

public class WordPrefixCheck {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Taking input from the user
        System.out.println("Enter the sentence:");
        String sentence = scanner.nextLine();

        System.out.println("Enter the word to check:");
        String word = scanner.next();

        // Checking if the word occurs as a prefix
        boolean result = isPrefixOfWord(word, sentence);

        // Displaying the result
        System.out.println("Output: " + result);

        scanner.close();
    }

    public static boolean isPrefixOfWord(String word, String sentence) {
        String[] words = sentence.split(" ");

        for (String w : words) {
```

```
            if (w.startsWith(word)) {
                return true;
            }
        }

        return false;
    }
}
```

Output:-

```
PS C:\Users\Ajeet\Desktop\java> javac WordPrefixCheck.java
PS C:\Users\Ajeet\Desktop\java> java WordPrefixCheck
Enter the sentence:
this ia simple demo sentence
Enter the word to check:
demo
Output: true
```

1185. Day of the Week

```
import java.util.Calendar;
import java.util.Scanner;

public class DayOfWeekCalculator {
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);

    // Input year, month, and day from the user
    System.out.print("Enter year (e.g., 2023): ");
    int year = scanner.nextInt();
```

```
  System.out.print("Enter month (1-12): ");
  int month = scanner.nextInt();

  System.out.print("Enter day of the month: ");
  int day = scanner.nextInt();

  // Get the day of the week using the Calendar class
  String dayOfWeek = calculateDayOfWeek(year, month, day);

  // Output the result
  System.out.println("The day of the week for " + month + "/" + day + "/" + year + " is: " + dayOfWeek);

  scanner.close();
 }

 private static String calculateDayOfWeek(int year, int month, int day) {
  // Create a Calendar instance
  Calendar calendar = Calendar.getInstance();

  // Set the year, month, and day
  calendar.set(year, month - 1, day); // Note: Months are 0-based in Calendar

  // Get the day of the week as an integer (Sunday = 1, Monday = 2, ..., Saturday
  // = 7)
  int dayOfWeekInt = calendar.get(Calendar.DAY_OF_WEEK);

  // Convert the integer to the corresponding day of the week
  String[] daysOfWeek = { "", "Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday",
"Saturday" };
  String dayOfWeek = daysOfWeek[dayOfWeekInt];
```

```
    return dayOfWeek;
  }
}
```

Output:-

```
PS C:\Users\Ajeet\Desktop\java> javac DayOfWeekCalculator.java
>>
PS C:\Users\Ajeet\Desktop\java> java DayOfWeekCalculator
>>
Enter year (e.g., 2023): 2023
Enter month (1-12): 5
Enter day of the month: 15
The day of the week for 5/15/2023 is: Monday
PS C:\Users\Ajeet\Desktop\java>
```