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// Constants for the Seven Pi Over Four Calendar System
const DAYS_PER_WEEK = 7;
const DAYS PER MONTH = 30;
const MONTHS PER YEAR = 12;
const INTERCALARY CYCLE = 7;
const INTERCALARY MONTH DAYS = 37;
const MICRO_YEAR_DAYS = 7;
const START_DATE = new Date(1913, 8, 15); // September 15, 1913 (Month is zero-based in
JavaScript)
function gregorianToSevenPiOverFour(gregorianDate) {
  const inputDate = new Date(gregorianDate);
  const deltaDays = Math.floor((inputDate - START DATE) / (1000 * 60 * 60 * 24));
  // Determine how many full 7-year cycles have passed
  const sevenYearCycles = Math.floor(deltaDays / (INTERCALARY CYCLE *
(MONTHS_PER_YEAR * DAYS_PER_MONTH) + INTERCALARY_MONTH_DAYS));
  // Calculate total intercalary days added
  const totalIntercalaryDays = sevenYearCycles * INTERCALARY MONTH DAYS;
  const adjustedDays = deltaDays + totalIntercalaryDays;
  // Find Seven Pi Over Four year
  const sevenPiYear = 1 + Math.floor(adjustedDays / (MONTHS PER YEAR *
DAYS_PER_MONTH + (sevenPiYear % INTERCALARY CYCLE === 0 ?
INTERCALARY MONTH DAYS: 0)));
  const daysIntoYear = adjustedDays % (MONTHS_PER_YEAR * DAYS_PER_MONTH +
(sevenPiYear % INTERCALARY CYCLE === 0 ? INTERCALARY MONTH DAYS : 0));
  // Determine if this is an intercalary year
  const isIntercalary = (sevenPiYear % INTERCALARY CYCLE === 0);
  // Adjust for 13th Month in Intercalary Years
  let sevenPiMonth = Math.floor(daysIntoYear / DAYS PER MONTH) + 1;
  let sevenPiDay = (daysIntoYear % DAYS PER MONTH) + 1;
  if (isIntercalary && sevenPiMonth > 12) {
    sevenPiMonth = 13;
    sevenPiDay = daysIntoYear - (MONTHS_PER_YEAR * DAYS_PER_MONTH) + 1;
  }
  // Identify Micro Year (last 7 days of Month 13)
  let microYearDay = (isIntercalary && sevenPiMonth === 13 && sevenPiDay >
(INTERCALARY MONTH_DAYS - MICRO_YEAR_DAYS)) ? sevenPiDay : null;
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// Determine week of macro year
  const weekOfMacroYear = Math.floor(adjustedDays / DAYS PER WEEK) + 1;
  // Determine day of the week (looping 1-7 continuously since start date)
  const dayOfWeek = (adjustedDays % DAYS PER WEEK) + 1;
  return {
     year: sevenPiYear,
     month: sevenPiMonth,
     day: sevenPiDay,
     week_of_macro_year: weekOfMacroYear,
     day of week: dayOfWeek,
     intercalary_year: isIntercalary,
     micro year day: microYearDay
  };
}
function updateCurrentDate() {
  const today = new Date();
  const convertedDate = gregorianToSevenPiOverFour(today);
  document.getElementById("currentDate").textContent =
     'Year: ${convertedDate.year}, Month: ${convertedDate.month}, Day: ${convertedDate.day},
     Week: ${convertedDate.week of macro year}, Day of Week:
${convertedDate.day_of_week}`;
}
function convertDate() {
  const inputDate = document.getElementById("gregorianDate").value;
  if (inputDate) {
     const convertedDate = gregorianToSevenPiOverFour(inputDate);
     let resultText = `Year: ${convertedDate.year}, Month: ${convertedDate.month}, Day:
${convertedDate.day},
               Week: ${convertedDate.week_of_macro_year}, Day of Week:
${convertedDate.day_of_week}`;
     if (convertedDate.intercalary_year) {
       resultText += `(Intercalary Year)`;
       if (convertedDate.micro_year_day !== null) {
         resultText += ` | Micro Year Day: ${convertedDate.micro year day}`;
       }
    }
     document.getElementById("conversionResult").textContent = resultText;
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} else {
    document.getElementById("conversionResult").textContent = "Please enter a valid date.";
}
updateCurrentDate();
```