MODULE

Assignment

General Instructions: Develop a program utilizing JavaScript to solve the problems stated below. All files must be submitted in your github repository and link it to your google classroom.

Naming Convention:

CourseYearSection_FirstNameInitialLastName_ActivityCode.js
e.g CS2A_JDelaCruz_C1-A1.js

C1-A1 Variable/Constants Declaration and String Concatenation Methods.

1.Develop a program that stores the following information for each of the persona stated below:

Persona: 1. Student's Information + 2 Classmate's Student information

a. First Name, Middle Name, Last Name (e.g Juan Gamos Dela Cruz)
b. Birthdate
c. Birthplace (Barangay, City/Town, Country, Zip Code)
d. Address (Barangay, City/Town, Country, Zip Code)
e. Course and Year
f. Dream Job after graduation (aligned to ITCS Field)

Note: **Store the required values in Regular Case Format

2. then, print all information of the students to form a sentence with the help of string concatenation and formatting methods for each of the declared persona; see sample of the expected output below:

Expected Output Sample:

[JUAN GAMOSO DELA CRUZ] was born [January 1, 2001] at [UPPER BONIFACIO, BAGUIO CITY, BENGUET, PHILIPPINES 2600], and currently living at [SAN NICOLAS, CANDON CITY, ILOCOS SUR, PHILIPPINES 2710]. [juan gamoso dela cruz] is taking up [bachelor of science in computer science] and dreams to be [Software Engineer] after graduation.

```
//CS2A_JDelaCruz_C1-A1.js
let student1FirstName = "Juan";
let student1MiddleName = "Gamos";
let student1LastName = "Dela Cruz";
let student1Birthdate = "January 1, 2001";
let student1Birthplace = "Upper Bonifacio, Baguio City, Benguet, Philippines 2600";
let student1Address = "San Nicolas, Candon City, Ilocos Sur, Philippines 2710";
let student1Course = "Bachelor of Science in Computer Science";
let student1DreamJob = "Software Engineer";

let student2FirstName = "Santchay";
let student2MiddleName = "Litdog";
let student2LastName = "Cabel";
let student2Birthdate = "August 18, 2006";
let student2Birthplace = "Poblacion, Quirino, Ilocos Sur, Philippines 2700";
let student2Address = "Barangay Dagman, Poblacion, Quirino, Ilocos Sur, Philippines
2701";
let student2Course = "Bachelor of Science in Computer Science";
let student2DreamJob = "Cybersecurity Analyst";

let student3FirstName = "Mark Lawrence";
let student3MiddleName = "Manggalis";
let student3LastName = "Galicia";
let student3Birthdate = "May 27, 2005";
let student3Birthplace = "Poblacion, Quirino, Ilocos Sur, Philippines 2900";
let student3Address = "Barangay Poblacion, Ilocos Sur, Philippines 2901";
let student3Course = "Bachelor of Physical Education";
let student3DreamJob = "PE Teacher";

// Student 1
console.log("[" + student1FirstName.toUpperCase() + " " +
student1MiddleName.toUpperCase() + " " + student1LastName.toUpperCase() + "] was
born [" + student1Birthdate + "] at [" + student1Birthplace + "], and currently living at [" +
student1Address + "].");
console.log("[" + student1FirstName.toLowerCase() + " " +
student1MiddleName.toLowerCase() + " " + student1LastName.toLowerCase() + "] is
taking up [" + student1Course.toLowerCase() + "] and dreams to be [" + student1DreamJob
+ "] after graduation.\n");

// Student 2
```

```
console.log("[" + student2FirstName.toUpperCase() + " " +
student2MiddleName.toUpperCase() + " " + student2LastName.toUpperCase() + "] was
born [" + student2Birthdate + "] at [" + student2Birthplace + "], and currently living at [" +
student2Address + "].");
console.log("[" + student2FirstName.toLowerCase() + " " +
student2MiddleName.toLowerCase() + " " + student2LastName.toLowerCase() + "] is
taking up [" + student2Course.toLowerCase() + "] and dreams to be [" + student2DreamJob
+ "] after graduation.\n");

// Student 3
console.log("[" + student3FirstName.toUpperCase() + " " +
student3MiddleName.toUpperCase() + " " + student3LastName.toUpperCase() + "] was
born [" + student3Birthdate + "] at [" + student3Birthplace + "], and currently living at [" +
student3Address + "].");
console.log("[" + student3FirstName.toLowerCase() + " " +
student3MiddleName.toLowerCase() + " " + student3LastName.toLowerCase() + "] is
taking up [" + student3Course.toLowerCase() + "] and dreams to be [" + student3DreamJob
+ "] after graduation.\n");
```

C1-A2: Mathematical and Comparison Operations, and Type Conversions.

1. Develop a program initializing 4 variables [a, b, c, d] and 1 constant [e], store the following values:
    a. 25
    b. 20
    c. 12
    d. “15”
    e. 15
2. then, display the following results of the required tasks below:
    a. Display the sum of the declared variables [a,b,c,d] and constant [e] combined.
    b. Compare the values of variable d and constant e using relational operators [>, <, =>, <=, and ===], then display the results.
    c. Declare new variables to store the result/s of the following operations, then after, display the results:
        1. Subtract all the values of the declared variables.
        2. Multiply the values of variable a and c, divided by constant e.
        3. Display the exponent value of constant e raise to the power of variable c.
        4. Reassign the value of c.3 to constant e, then display the result.

```
let a = 25;
let b = 20;
let c = 12;
let d = "15"; // String
const e = 15;

// Step 2a:
let sum = a + b + c + Number(d) + e;
```

```
console.log("Sum of a, b, c, d, and e:", sum);




// Step 2b:
console.log("d > e:", Number(d) > e);
console.log("d < e:", Number(d) < e);
console.log("d >= e:", Number(d) >= e);
console.log("d <= e:", Number(d) <= e);
console.log("d === e:", Number(d) === e);

// Step 2c.1:
let subtractValues = a - b - c - Number(d) - e;
console.log("Subtract Values:", subtractValues);

// Step 2c.2:
let multiplyAndDivisionValues = (a * c) / e;
console.log("Multiply and division Values:", multiplyAndDivisionValues);

// Step 2c.3:
let exponentValues = e ** c;
console.log("Exponentiation Values (e^c):", exponentValues);

// Step 2c.4:
let newE = exponentValues;
console.log("Reassigned value to newE:", newE);
```

Descriptive Title: DATA STRUCTURES AND ALGORITHMS
Units: 3 Units

Instructor: VJDB/ CO PASCUA