1. Assignment: Variable Practice

Instructions:

1. Create a new JavaScript file and save it as "variables.js".
2. Write JavaScript code to complete the tasks described below.
3. Test your code by running the "variables.js" file in a web browser or using a JavaScript console.

Tasks:

1. Declare a variable called "age" and assign your age to it.

2. Declare a variable called "name" and assign your name to it.

3. Declare a variable called "isStudent" and assign a boolean value (true or false) indicating if you are a student or not.

4. Declare a variable called "birthYear".

5. Print the following information using console.log():

   - Your name and age: "My name is [name] and I am [age] years old."

   - Whether you are a student or not: "I am a student: [isStudent]."

   - Your birth year: "I was born in [birthYear]."

2. Assignment: Data Type Practice

Instructions:

1. Create a new JavaScript file and save it as "dataTypes.js".
2. Write JavaScript code to complete the tasks described below.
3. Test your code by running the "dataTypes.js" file in a web browser or using a JavaScript console.

Tasks:

1. Declare a variable called "name" and assign your name to it (as a string).
2. Declare a variable called "age" and assign your age to it (as a number).
3. Declare a variable called "isStudent" and assign a boolean value (true or false) indicating if you are a student or not.
4. Declare a variable called "hobbies" and assign an array containing at least three of your hobbies.
5. Declare a variable called "address" and assign an object with properties "street", "city", and "country" representing your address.
6. Print the following information using console.log():
   - Your name: "My name is [name]."
   - Your age: "I am [age] years old."
   - Whether you are a student or not: "I am a student: [isStudent]."
   - Your hobbies: "My hobbies are [hobbies]."
   - Your address: "I live at [street], [city], [country]."

Example Output:

My name is John.

I am 25 years old.

I am a student: true.

My hobbies are reading, painting, and hiking.

I live at 123 Main Street, Cityville, Countryland.

3. Assignment: Operator Practice

Instructions:

1. Create a new JavaScript file and save it as "operators.js".
2. Write JavaScript code to complete the tasks described below.
3. Test your code by running the "operators.js" file in a web browser or using a JavaScript console.

Tasks:

1. Declare two variables called "num1" and "num2" and assign them any numeric values.
2. Use the addition operator to calculate the sum of "num1" and "num2". Store the result in a variable called "sum".
3. Use the subtraction operator to calculate the difference between "num1" and "num2". Store the result in a variable called "difference".
4. Use the multiplication operator to calculate the product of "num1" and "num2". Store the result in a variable called "product".
5. Use the division operator to calculate the quotient of "num1" divided by "num2". Store the result in a variable called "quotient".
6. Use the modulus operator to calculate the remainder when "num1" is divided by "num2". Store the result in a variable called "remainder".
7. Print the following information using console.log():
   - The sum of num1 and num2: "The sum is [sum]."
   - The difference between num1 and num2: "The difference is [difference]."
   - The product of num1 and num2: "The product is [product]."
   - The quotient of num1 divided by num2: "The quotient is [quotient]."
   - The remainder when num1 is divided by num2: "The remainder is [remainder]."

4. Assignment: If-Else Practice

Instructions:

1. Create a new JavaScript file and save it as "ifElse.js".
2. Write JavaScript code to complete the tasks described below.
3. Test your code by running the "ifElse.js" file in a web browser or using a JavaScript console.

Tasks:

1. Declare a variable called "temperature" and assign it a numeric value representing the current temperature.

2. Write an if-else statement to check if the temperature is greater than or equal to 30 degrees Celsius.

   - If the temperature is greater than or equal to 30, print "It's a hot day!" using console.log().

   - Otherwise, print "It's a normal day!" using console.log().

3. Declare a variable called "isRaining" and assign it a boolean value (true or false) indicating if it's raining or not.

4. Write an if-else statement to check if it's raining.

   - If it's raining, print "Don't forget your umbrella!" using console.log().

   - Otherwise, print "Enjoy your day!" using console.log().

5. Declare a variable called "time" and assign it a numeric value representing the current hour of the day (in 24-hour format).

6. Write an if-else statement to check the time of the day.

   - If the time is between 6 AM and 12 PM (inclusive), print "Good morning!" using console.log().

   - If the time is between 12 PM and 6 PM (inclusive), print "Good afternoon!" using console.log().

   - If the time is between 6 PM and 12 AM (inclusive), print "Good evening!" using console.log().

   - Otherwise, print "Good night!" using console.log().

*** Submit your all file as a pdf once you have completed the tasks. ***