Assignments One: Introduction to JS

QUESTION 1:

- Use `toUpperCase()` on a string variable.
- Parse a number from a string using `parseInt()`.
- Create an array and use `push()` to add an item, then `pop()` to remve it.

QUESTION 2:

- Create a string variable `greeting` with the value "Hello!".
- Create a number variable `age` with a realistic value.
- Create a boolean variable `isStudent` and set it to `true` or `false`.
- Print each variable type using `typeof` to check its data type.

QUESTION 3:

- Perform addition, subtraction, multiplication, and division with two numbers.
- Use comparison operators to check if a number is greater than or equal to another.
- Use logical operators to combine two boolean values and print the result.

QUESTION 4:

- Create a variable `heightInMeters` and convert it to centimeters.
- Concatenate strings and variables to form a message.

QUESTION 5: Calculate Age from Birth Year

- Declare a constant `birthYear` and set it to your birth year.
- Create a variable `currentYear` and set it to the current year.
- Calculate and print your age using these two variables.

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QUESTION 6: Full Name Formatter

- Declare two variables, `firstName` and `lastName`, and assign your first and last names.
- Create a new variable `fullName` that combines both names with a space in between.
- Print a greeting that includes your full name.

QUESTION 7: Average Score Calculator

- Declare three variables, `score1`, `score2`, and `score3`, and assign them random test scores.
- Calculate the average score by adding all three scores and dividing by 3.
- Print the average with a "The average score is: " + averageScore.

QUESTION 8: Convert Minutes to Hours and Minutes

- Declare a variable `totalMinutes` and assign it a random number of minutes (e.g., 135).
- Calculate how many hours and remaining minutes this total equals.
- Print the result in the format: "X hours and Y minutes."

QUESTION 9: Price Calculator with Tax

- Declare a variable `itemPrice` and set it to any amount (e.g., 50).
- Declare a variable `taxRate` and set it to a percentage (e.g., 0.07 for 7%).
- Calculate the total price by adding the tax to the `itemPrice`.
- Print the total price.

QUESTION 9: Sentence Builder with User Input (Prompt)

- Use `prompt()` to ask the user for their favorite color and food.
- Store these in variable `color` and `food`.
- Build a sentence that says, "Your favorite color is [color] and you love [food]."
- Print the sentence.

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  - `npm install prompt-sync`
 then add the code below at the top level
 `const prompt = require("prompt-sync")({sigint: true});`
```

QUESTION 10: Conditional Discount Calculator

- Declare a variable `purchaseAmount` and set it to any amount (e.g., 200).
- If `purchaseAmount` is greater than 100, apply a 10% discount. Otherwise, apply a 5% discount.
- Calculate the discounted price and print it.

QUESTION 11: Simple BMI Calculator

- Declare two variables `weightInKg` and `heightInMeters`.
- Calculate the BMI using the formula: `BMI = weight / (height * height)`.
- Print the result with a message.

QUESTION 12: Temperature Converter (Celsius to Fahrenheit)

- Declare a variable `celsius` and set it to a temperature in Celsius.
- Convert the temperature to Fahrenheit using the formula: `F = C * 9/5 + 32`.
- Print the Fahrenheit temperature.

QUESTION 13: Greeting Based on the Time of Day

- Declare a variable `currentHour` and set it to the current hour (in 24-hour format).
- If the hour is less than 12, print "Good Morning!". If between 12 and 18, print "Good Afternoon!". Otherwise, print "Good Evening!".