Janine Chrystal Ampusta BSIT 3 – 1N
Activity #6 - Functions

1. Write a JavaScript function called checkAge that takes an age as an argument and returns a message based on the following conditions:
2. If the age is less than 13, return "You are a child."
3. If the age is between 13 and 19 (inclusive), return "You are a teenager."
4. If the age is between 20 and 64 (inclusive), return "You are an adult."
5. If the age is 65 or older, return "You are a senior."
6. If the input is not a valid number, return "Please enter a valid age."

Code

```
//For user to input
const readline = require('readline');
const rl = readline.createInterface({
    input: process.stdin,
    output: process.stdout
});

//For answer to question
const askQuestion = (question) => {
    return new Promise((resolve) => {
        rl.question(question, (answer) => {
            resolve(answer);
        });
    });
};

async function checkAge(){
    let continueProgram;

        //start of do-while
        do {
            //Asks the user's age
            let age = await askQuestion("How old are you?: ");
            age = Number(age);

            //Identifies the user's age category
            if (age > 0 && age <= 13){
                    console.log("You are a Child!");
                } else if (age >= 13 && age <= 19){
                        console.log("You are a Teenager!");
                } else if (age >= 20 && age <= 64){
                                console.log("You are an Adult!")
                } else if (age >= 65){
                                console.log("You are a senior!");
            } else {
```

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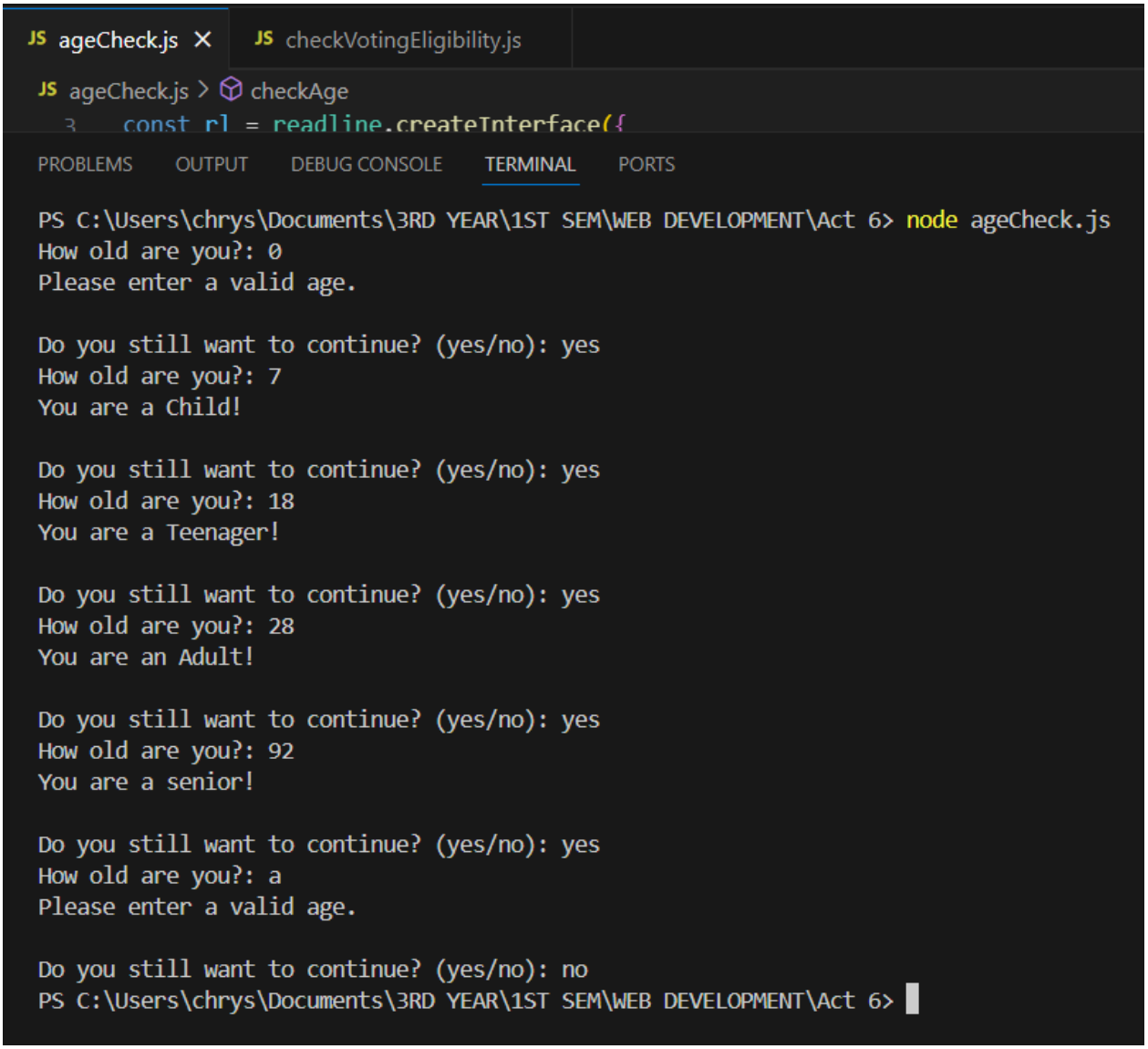
```
                console.log("Please enter a valid age.")
            };

            //Asks the user to exit or continue
            const continueResponse = await askQuestion("\nDo you still want to
continue? (yes/no): ");
            continueProgram = continueResponse.toLowerCase() === "yes";

        } while (continueProgram);


    rl.close();     //program close
};

checkAge(); // call checkAge function
```

Output



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2. Write a JavaScript function called checkVotingEligibility that takes two parameters: age (a number) and isCitizen (a boolean). The function should return a message based on the following conditions:

1. If the age is not a valid number (e.g., negative number or non-numeric), return "Please enter a valid age."
2. If isCitizen is not a boolean, return "Please specify your citizenship status."
3. If the age is less than 18, return "You are not eligible to vote."
4. If the age is 18 or older and isCitizen is true, return "You are eligible to vote."
5. If the age is 18 or older and isCitizen is false, return "You must be a citizen to vote."

Code

```
// For user to input
const readline = require("readline");
const rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout,
});

// For answer to question
const askQuestion = (question) => {
  return new Promise((resolve) => {
    rl.question(question, (answer) => {
      resolve(answer);
    });
  });
};

// Function to validate age input
function validateAge(age) {
  if (typeof age !== "number" || isNaN(age) || age <= 0) {
    return "Please enter a valid age.";
  }
  return null;
}

// Function to validate citizenship input
function validateCitizen(isCitizenBa) {
  if (isCitizenBa !== "yes" && isCitizenBa !== "no") {
    return "Please specify your citizenship status as 'yes' or 'no'.";
  }
  return null;
}

// Determine voting eligibility
function eligibleBa(age, isCitizen) {
  if (age < 18) {
```

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```
    return "You are not eligible to vote.";
  } else if (age >= 18 && isCitizen) {
    return "You are eligible to vote.";
  } else if (age >= 18 && !isCitizen) {
    return "You must be a citizen to vote.";
  }
}

// Main function to check voting eligibility
async function checkVotingEligibility() {
  let continueProgram;

  do {
    let age;
    let isCitizenBa;
    let isCitizen;
    let validInputs = false;

    // Keep asking for valid inputs until both are valid
    while (!validInputs) {
      // Ask the user's age
      const ageInput = await askQuestion("How old are you? ");
      age = Number(ageInput);

      // Validate age
      const ageError = validateAge(age);
      if (ageError) {
        console.log(ageError);
        continue; // Ask again
      }

      // Ask the user's citizenship status
      isCitizenBa = await askQuestion("Are you a citizen? (yes/no): ");
      const citizenError = validateCitizen(isCitizenBa.toLowerCase());
      if (citizenError) {
        console.log(citizenError);
        continue; // Ask again
      }

      // If both inputs are valid, exit the validation loop
      validInputs = true;
    }

    // Convert citizenship input to boolean
    isCitizen = isCitizenBa.toLowerCase() === "yes";

    // Determine eligibility
    const decision = eligibleBa(age, isCitizen);
```

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```
    console.log(decision);

    // Ask the user if they want to continue
    const continueResponse = await askQuestion(
      "\nDo you still want to continue? (yes/no): "
    );
    continueProgram = continueResponse.toLowerCase() === "yes";
  } while (continueProgram);

  rl.close(); // Close the readline interface
}

checkVotingEligibility(); // Call the function
```

Output