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:
- If the age is less than 13, return "You are a child."
- If the age is between 13 and 19 (inclusive), return "You are a teenager."
- If the age is between 20 and 64 (inclusive), return "You are an adult."
- If the age is 65 or older, return "You are a senior."
- If the input is not a valid number, return "Please enter a valid age."

Source Code:

```html
1   <!DOCTYPE html>
2   <html lang="en">
3     <head>
4       <meta charset="UTF-8">
5       <meta name="viewport" content="width=device-width, initial-scale=1.0">
6       <title>Activity #6</title>
7     </head>
8     <script>
9       function checkAge() {
10        let exitProgram = false;
11
12        do {
13          let userAge = prompt("Enter Your Age: ");
14          userAge = Number(userAge);
15
16          if (isNaN(userAge) || userAge <= 0) {
17            alert("Invalid Input! Please enter a valid positive number.");
18          } else if (userAge < 13) {
19            alert("You are a child.");
20          } else if (userAge >= 13 && userAge <= 19) {
21            alert("You are a teenager.");
22          } else if (userAge >= 20 && userAge <= 64) {
23            alert("You are an adult.");
24          } else if (userAge >= 65) {
25            alert("You are a senior.");
26          } else {
27            alert("Invalid Input!");
28          }
29
30          let continueChoice = prompt("Do you want to continue? (yes/no)").toLowerCase();
31          if (continueChoice === "no") {
32            exitProgram = true;
33            alert("Thank You for Using the Age Checker!");
34          }
35        } while (!exitProgram);
36      }
37
38      checkAge();
39    </script>
40  </html>
41
```

Output:

127.0.0.1:5500 says

Enter Your Age:

18

OK   Cancel

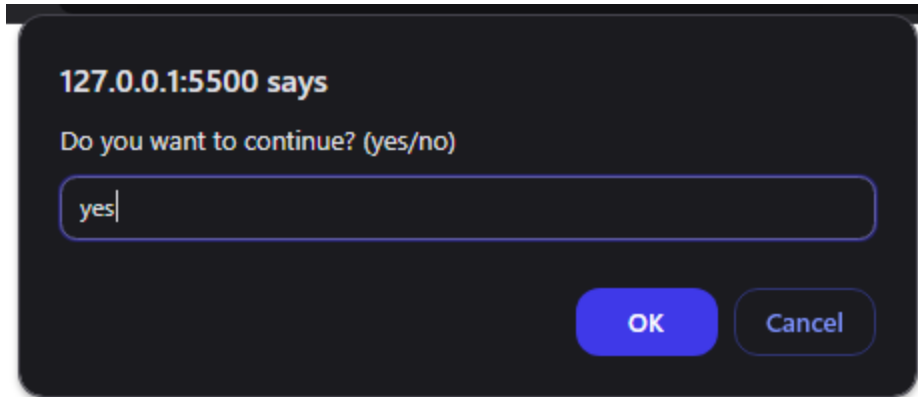**127.0.0.1:5500 says**

You are a teenager.

OK

127.0.0.1:5500 says

You are a child.

OK

127.0.0.1:5500 says

You are a senior.

OK

127.0.0.1:5500 says

Do you want to continue? (yes/no)

yes|

OK   Cancel

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:

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

Source Code:

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Activity #6</title>
  </head>
  <script>
    function checkVotingEligibility() {
      let exitProgram = false;

      do {
        let userAge = prompt("Enter Your Age: ");
        let isCitizen = prompt("Are you a Filipino Citizen? (yes/no)").toLowerCase();
        userAge = Number(userAge);

        if (isCitizen === "yes") {
          isCitizen = true;
        } else if (isCitizen === "no") {
          isCitizen = false;
        } else {
          alert("Invalid citizenship input! Please answer 'yes' or 'no'.");
          continue;
        }

        if (isNaN(userAge) || userAge <= 0) {
          alert("Please enter a valid age.");
        } else if (userAge < 18) {
          alert("You are not eligible to vote.");
        } else if (userAge >= 18 && isCitizen) {
          alert("You are eligible to vote.");
        } else if (userAge >= 18 && !isCitizen) {
          alert("You must be a Filipino citizen to vote.");
        } else {
          alert("Invalid input!");
        }

        let continueChoice = prompt("Do you want to continue? (yes/no)").toLowerCase();
        if (continueChoice === "no") {
          exitProgram = true;
          alert("Thank You for Using the Voting Eligibility Checker!");
        }
      } while (!exitProgram);
    }

    checkVotingEligibility();
  </script>
</html>
```

Output:

127.0.0.1:5500 says

Enter Your Age:

18

OK   Cancel

127.0.0.1:5500 says

Enter Your Age:

yes

OK   Cancel

127.0.0.1:5500 says

You are eligible to vote.

OK

127.0.0.1:5500 says

You are not eligible to vote.

OK

127.0.0.1:5500 says

You must be a Filipino citizen to vote.

OK

127.0.0.1:5500 says

Please enter a valid age.

OK

127.0.0.1:5500 says

Do you want to continue? (yes/no)

OK   Cancel