

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

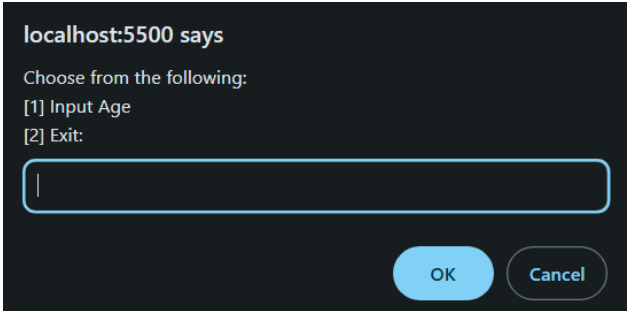
File:

<https://drive.google.com/drive/folders/1i6lFxG1KuaVG4y9n3yUmJpWiobd4RN59?usp=sharing>

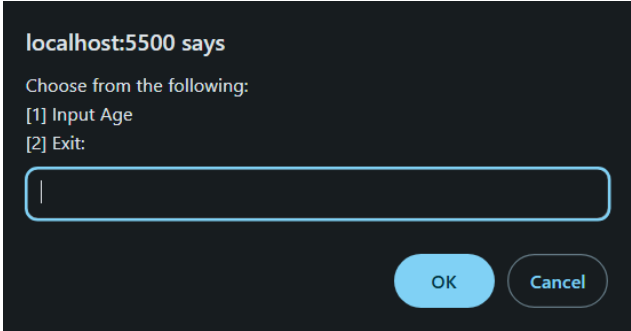
```
index.html JS javascript.js X
Activity6 > JS javascript.js > checkAge
1 // User Input Function
2 function getUserInput(question) {
3     let input = parseInt(prompt(question + ": "));
4     return input;
5 }
6
7 // Check Age Function
8 function checkAge(age) {
9     if (age <= 0 || isNaN(age)) {
10         return "Error: Please enter a valid age!";
11     } else if (age < 13) {
12         return "Result: You are a child";
13     } else if (age >= 13 && age <= 19) {
14         return "Result: You are a teenager";
15     } else if (age >= 20 && age <= 64) {
16         return "Result: You are an adult";
17     } else if (age >= 65) {
18         return "Result: You are a senior";
19     }
20 }
21
22 // Main Program Loop
23 let input, result;
24 do {
25     input = getUserInput("Choose from the following: \n[1] Input Age\n[2] Exit");
26
27     if (input == 1) {
28         let age = getUserInput("Input your age");
29         result = checkAge(age);
30         alert(result);
31     } else if (input != 2) {
32         alert("Error: Input out of range!");
33     }
34 } while (input != 2);
35
36 alert("Thank you for using the program.");
37
```

Output:

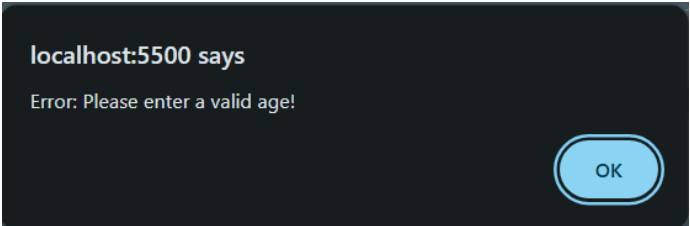
Main Program:



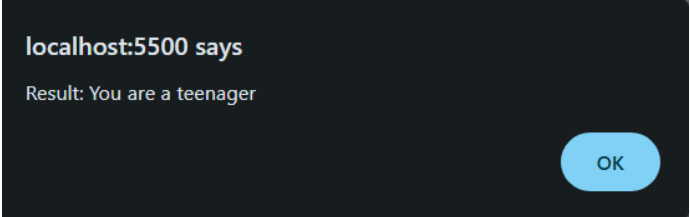
- Input 1:



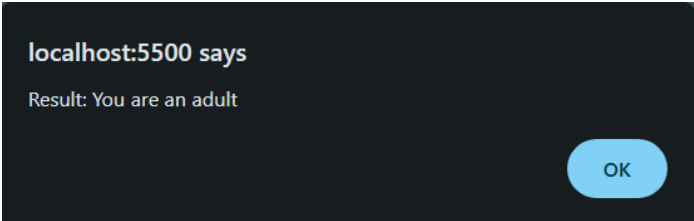
- Invalid input or input equal to zero:



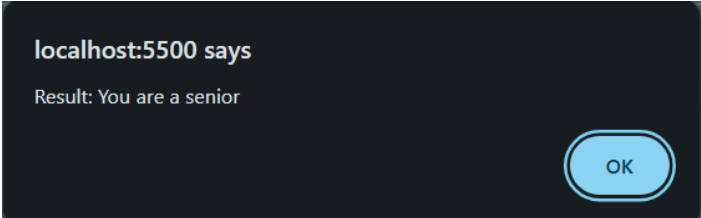
- Result: You are a child (sample input 13):



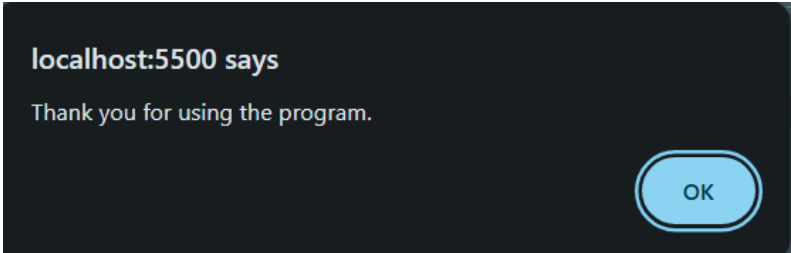
- Result: You are an adult (sample input 20):



- Result: You are an senior (sample input 70):



- Input 2:



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

File:

<https://drive.google.com/drive/folders/1Bu2z4BrWVTmXV1J5jhziiT3P5fsidNhu?usp=sharing>

```
index.html JS javascript.js X
Activity6 > checkVotingEligibility > JS javascript.js > checkVotingEligibility
1 // Use input function
2 function getUserInput(question) {
3   let input = prompt(question + ": ");
4   return input;
5 }
6
7 // Check Voting Eligibility
8 function checkVotingEligibility(age, isCitizen) {
9   let result = "";
10  if (age < 18) {
11    result = "Status for Voting: You are not eligible to vote.";
12  } else if (age >= 18 && isCitizen === true) {
13    result = "Status for Voting: You are eligible to vote.";
14  } else if (age >= 18 && isCitizen === false) {
15    result = "Status for Voting: You are not eligible to vote.";
16  } else {
17    result = "Status for Voting: You are not eligible to vote.";
18  }
19  return result;
20 }
21
22 // Main Program Loop
23 let input, age, isCitizen, result;
24 do {
25   input = getUserInput("Choose from the following: \n[1] Input credentials\n[2] Exit");
26   if (parseInt(input) === 1) {
27     age = parseInt(getUserInput("Input your age"));
28
29     if (age <= 0 || isNaN(age)) {
30       alert("Error: Please enter a valid age!");
31       continue;
32     } else {
33       let citizenInput = getUserInput("Are you a citizen? Enter 'true' or 'false': ").toLowerCase();
34
35       if (citizenInput === 'true') {
36         isCitizen = true;
37       } else if (citizenInput === 'false') {
38         isCitizen = false;
39       } else {
40         alert("Error: Please enter 'true' or 'false' for citizenship status.");
41         continue;
42       }
43
44       result = checkVotingEligibility(age, isCitizen);
45       alert(result);
46     }
47   } else if (parseInt(input) !== 2) {
48     alert("Error: Input out of range!");
49   }
50 } while (parseInt(input) !== 2);
51
52 alert("Thank you for using the program.");
```

Output

Main Program:

localhost:5500 says

Choose from the following:

[1] Input credentials

[2] Exit:

OK

Cancel

- Input: 1

- Input age:

localhost:5500 says

Input your age:

OK

Cancel

- Input true or false in citizenship:

localhost:5500 says

Are you a citizen? Enter 'true' or 'false': :

OK

Cancel

- If 18 or above and a citizen:

localhost:5500 says

Status for Voting: You are eligible to vote.

OK

- If 18 or above, but no a citizen:

localhost:5500 says

Status for Voting: You are not eligible to vote.

OK

- Invalid age:

localhost:5500 says

Error: Please enter a valid age!

OK

- Invalid citizen validation:

localhost:5500 says

Error: Please enter 'true' or 'false' for citizenship status.

OK

- Input: 2

localhost:5500 says

Thank you for using the program.

OK