19/12/22

The square brackets in [] are used to declare an array. The array 'numbers' is declared but not initialised with any elements. It is used later in the code to store the numbers entered by the user.

The '!==' operator is the opposite of the '===' operator. '!==' performs a strict comparison and does not perform type coercion, just like the '===' operator.

Type coercion: converting a value from one data type to another.

REDUCE () method

Example code:

```
const numbers = [1,2,3,4];
const sum = numbers.reduce((a+b) => a+b);
```

((accumulator, currentValue). The parameters 'a' and 'b' represent. The names of the parameters can be anything. In this example there are 3 iterations (rounds) to the reduce() method. Iteration 1: accumulator (a) is set to the first element in the array (1), and the currentValue (b) is set to the second element (2). The function returns 3 (1+2), which becomes the new value of the accumulator

Iteration 2:
a = 3
b = third element 3
a + b = 6

Iteration 3:
a = 6
b = 4
a + b = 10
The function returns 10 and is logged to the console.

```
//TASK 8 PART 2

const numbers = []; // array to store the numbers entered by the user
let input; // variable to store the user input

while (input !== "-1") { // loop until the user enters "-1"
  input = prompt("Enter a number or -1 to stop:");
  if (input !== "-1") {
    const number = parseInt(input); // parse the input as an integer
    numbers.push(number); // add the number to the array
  }
}

if (numbers.length > 0) { // check that at least one number was entered to calc avg
  const sum = numbers.reduce((a, b) => a + b); // calculate the sum of the numbers
  const avg = sum / numbers.length; // calculate the average
  console.log(avg.toFixed(2)); // log the average to the console
}
```

The 'push()' method is used to add one or more elements to the end of an array. The parsed integers entered by the user is added to the 'numbers' array.

1 more than

```
if (!NaN(number)) { //Check if the input is a number
  numbers.push(number); //add the number to the array
} else {
  console.log("Please enter a valid number.");
}
```