# Trainer guide
# Examples and exercises
# JS-4 – Ternary operator

## Contents

# JS-4a | Exercise: Ternary operator

Link to environment

This exercise gives learners practice on taking if-else statements and writing the same logic in a more concise way using the ternary operator.

**index.js**

- In this exercise, we'll practice writing concise conditional statements with the ternary operator.

**Demo**

- Look at this first function, `getParity()`
    - It takes in one parameter, which is a number.
    - If the number is even, then the function returns the string "even".
    - Otherwise, the function returns the string "odd".
- To write a statement using the ternary operator, we need to ask three questions.
    - The first question is: "What is the condition?"
        - In this case, the condition is: `number % 2 === 0`
    - The second question is: "What value do we want if the condition is true?"
        - In this case, that would be the string "even".
    - The third question is: "What value do we want if the condition is false?"
        - In this case, that would be the string "odd".
- Now that we've answered all three questions, we can write our ternary statement.
    - **The first part** of a ternary statement is always the condition. We've identified the condition to be `number % 2 === 0.`
        - *Write* `number % 2 === 0` *as the first line of the function body.*
    - **After the condition**, we write the ternary operator itself. In JavaScript the ternary operator is the question mark.
        - *The first line of the function body should now read:* `number % 2 === 0 ?`
    - **After the question mark**, we write the value that we want if the condition is true. We know that if the condition is true, we want the string "even".
        - *The first line of the function body should now read:* `number % 2 === 0 ? 'even'`

- o **Next**, we write a colon. The colon essentially means "else" or "otherwise".
  - The first line of the function body should now read:
    ```
    number % 2 === 0 ? 'even' :
    ```
- o **Finally**, we write the value that we want if the condition is false. If the condition is false, we want the string "odd".
  - The first line of the function body should now read:
    ```
    number % 2 === 0 ? 'even' : 'odd'
    ```
- We now have a ternary expression that will either evaluate to "even" or "odd".
- The last thing we need to do is simply return this value from the function.
  - o The function body should now read:
    ```
    return number % 2 === 0 ? 'even' : 'odd'
    ```

**Exercise**

- Now that we've seen how to write a statement with the ternary operator, let's get a little more practice.
- Your task is to rewrite the remaining functions in index.js using the ternary operator.
- The body of each function should only be one line long.

*Solve the exercise live before moving on.*

Link to solution