**TASK 1**

Firstly, we have all add all necessary files and then doctype html

Then in the **<body>** section contains a **<div>** with the class "product," representing the product carousel.

* Inside this div, there are two **<i>** elements with the IDs "left" and "right," which resumed represent left and right navigation arrows for the carousel.
* A **<ul>** list with the class "carousel" is used to hold a series of **<li>** items, each representing a product card in the carousel.
* It uses of external stylesheets and scripts promotes a separation of concerns, making the code more modular and maintainable.
* The choice of Font Awesome for icons is common and convenient, allowing for easy integration of scalable vector icons.
* The defer attribute on the script tag ensures that the script is executed after the HTML document is parsed, reducing the page load time.  
    
    
    
  **Variable Declarations:**
* **product**: Represents the container of the entire carousel.
* **carousel**: Represents the carousel element containing product cards.
* **firstCardWidth**: Stores the width of the first product card in the carousel.
* **arrowBtns**: Node List containing left and right arrow buttons.
* **carouselChildrens**: An array containing the child elements of the carousel.

**Initialization:**

* **isDragging**: A Boolean flag indicating whether the user is currently dragging the carousel.
* **isAutoPlay**: A Boolean flag indicating whether auto play is enabled.
* **startX**: Initial X-coordinate of the cursor when dragging starts.
* **startScrollLeft**: Initial scroll position of the carousel when dragging starts.
* **timeoutId**: Stores the ID of the timeout used for auto play.