

#3.1 Write a function called `linear_search_product` that takes the list of products and a target product name as input. The function should perform a linear search to find the target product in the list and return a list of indices of all occurrences of the product if found, or an empty list if the product is not found.

```
def linear_search_product(product_list, target_product):  
    indices = []  
    for i, product in enumerate(product_list):  
        if product == target_product:  
            indices.append(i)  
    return indices  
  
# Example usage:  
products = ["apple", "banana", "apple", "orange", "apple"]  
target = "apple"  
result = linear_search_product(products, target)  
if result:  
    print(f"The product '{target}' was found at indices: {result}")  
else:  
    print(f"The product '{target}' was not found in the list.")
```