

Echahid Hamma Lakhdar University of El-Oued
Department of Computer Science
Level: 2nd Year LMD Computer Science
Course: Algorithms and Data Structures 03
Lab Work No. 3
(Circular Singly Linked List)

Let a list of Products be defined as follows:

```
typedef struct Product {  
    int ID;  
    char Name[20];  
    int Price;  
}Product;
```

and the list has the following structure:

```
typedef struct Node {  
    Product Prod;  
    struct Node *next;  
}Node;
```

- Q1. Write a function to create an empty circular singly linked list and a function to check if the list is empty.
- Q2. Write functions to insert a new product:
- at the beginning of the circular list,
 - at the end of the circular list.
- Q3. Write a function to display all products in the circular list, making sure to traverse the list only once without infinite looping.