1. **Given a list Integer vale, write a python program to check whether it contains same number in subsequent position. Display the count of such occurrences.**

**Estimated Time: 30 Minutes**

**Sample Input Sample Output**

**[1, 1, 5, 100, 20, 20, 6, 0, 0] 3**

**[10, 20, 30, 40, 30, 20] 0**

**[1, 2, 2, 3, 4, 4,10] 2**

1. **The Metro Bank provides various types of loan such as car loans, Business loans and house loans to its account holders. Write a python program to implement the following requirements:**

* **Initialize the following variables with appropriate input values: Account\_Number, Account\_balance, salary, loan\_type, Loan\_amount\_expected and Customer\_emi\_Expected.**
* **The Account number should be of 4 digits and its first digit should be 1.**
* **The customer should have a minimum balance of Rupees 1 lakh in the account.**
* **If the above rules are valid, determine the eligible loan amount and the EMI that the bank can provide to its customer based on their salary and the loan type they expect to avail.**
* **The bank would provide the loan, only if the loan amount and the number of EMI’s requested by the customer is less than or equal to the loan amount and the number of EMI’s decided by the bank respectively.**

**Display appropriate error message for the invalid data. If all the business rules are satisfied, the display account number, eligble and requested loan amount and EMI’s.**

**Test your code by providing different values for input variables.**

**Salary Loan Type Eligible loan amount No. of EMI’s Required to Repay**

**>25000 Car 500000 36**

**> 50000 House 6000000 60**

**> 75000 Business 7500000 84**

1. **Write a python program to find the bill amount to be paid by the customer while ordering food online from a restaurant. The bill amount includes the amount for the food ordered based on the quantity and delivery charge based on distance of delivery as mentioned below:**

**The Restaurant , home delivers the vegetarian combo costing Rs. 120 per plate and the non-vegetarian Rs. 150 per plate. Infact the restaurant gets more order for non- vegetarian combo than the vegetarian combo.**

**The Customer must specify the type of food, quantity (no. of paltes) required and the approximate distance in kms from the restaurant to the delivery point.**

**The below information must be use to check the validity of data provided by the customer:**

* **Type of food must be ‘V’ for vegetarian and ‘N’ for non-Vegetarian.**
* **Distance in kms must be greater than 0.**
* **Quantity ordered should be minimum 1**

**Identify the cost of food and delivery charge based on the type of food and distance provided. Then the bill amount must be calculated as give below:**

**Bill amount = cost per plate\* quantity ordered+ Delivery charge**

**Use the information provided in the table below to calculte the delivery charge. The bill amount should be returned as -1, if any of the inputs is invalid**

**Distance in kms. Delivery charge in Rs per km.**

**For first 3 kms 0**

**For next 3 kms 3**

**For the remaining 6**

**Note: Initialize type of food, quantity and distance in kms with different values and test your program.**