1. Write a Python program to reverse a list at a specific location.

**Given list: my\_list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]**

**Expected Output:**

**Original list:**

**[10, 20, 30, 40, 50, 60, 70, 80]**

**Reverse elements of the said list between index position 2 and 4**

**[10, 20, 50, 40, 30, 60, 70, 80]**

1. Write a program to calculate the sum of series up to n term. For example, **if n =5 the series will become 2 + 22 + 222 + 2222 + 22222 = 24690**
2. **Write a Python function to remove duplicates from a list while preserving the order.**
3. Write a Python program to display the astrological sign for a given date of birth.

**Expected Output**:

**Input birthday: 15**

**Input month of birth (e.g. march, july etc): may**

**Your Astrological sign is : Taurus**

1. Write a Python program to get the next day of a given date.

**Expected Output:**

**Input a year: 2024**

**Input a month [1-12]: 08**

**Input a day [1-31]: 10**

**The next date is [yyyy-mm-dd] 2024-8-11**

1. Write a Python program to convert a month name to a number of days.

**Expected Output:**

**List of months: January, February, March, April, May, June, July, August, , September, October, November, December**

**Input the name of Month: February**

**No. of days: 28/29 days**

1. **Write a Python program to check the validity of passwords input by users.  
   Validation :**

* At least 1 letter between [a-z] and 1 letter between [A-Z].
* At least 1 number between [0-9].
* At least 1 character from [$#@].
* Minimum length 6 characters.
* Maximum length 16 characters

1. Write a Python function that performs matrix multiplication using list comprehensions.
2. Write a Python program to find the first duplicate element in a given array of integers. **Return -1** if there are no such elements.

**Arr1=[ 1, 2, 3, 4, 4, 5]**

**Arr2 = [1, 2, 3, 4]**

**Arr3=[ 1, 1, 2, 3, 3, 2, 2]**

1. Write a  Python program to find the missing number in a given array of numbers between 10 and 20.

**Given Array**

**Arr1 = [10, 11, 12, 13, 14, 16, 17, 18, 19, 20])**

**Arr2 = [10, 11, 12, 13, 14, 15, 16, 17, 18, 19])**