

Complex Problems:

1. Find the multiplication result of the following matrix.

$$\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{bmatrix} \times \begin{bmatrix} 7 & 8 \\ 9 & 10 \\ 11 & 12 \end{bmatrix} = \begin{bmatrix} 58 & 64 \\ 139 & 154 \end{bmatrix} \quad \checkmark$$

2. Write a program to print and find the result of following tailer series upto 8:

$$1+2+2^2 / 2!+2^3 / 3!+2^4 / 4!+2^5 / 5!+2^6 / 6!+2^7 / 7!+2^8 / 8!$$

Output: **7.3873**

3. Find whether the given string nameOne is anagram of nameTwo

Input: nameOne: battle nameTwo: tablet

Output: Name one and two are Anagrams

Input: nameOne: triangle nameTwo: integral

Output: Name one and two are Anagrams

4. Write a program that removes the duplicate characters in a given string.

a. Input : ravichandran Ouput: ravichnd

5. Check whether a given string is palindrome or not.

Input: radar **Ouput:** radar is a palindrome