## Analysis of Algorithms:

| Algorithm | Time Complexity | Space Complexity |
|---|---|---|
| 1) addMatrices() | $O(m \times n)$ where $m, n$ are rows & columns respectively. | Space is required to store the elements of addition matrix. : space complexity is $O(m \times n)$ where $m, n$ are rows, columns respe. |
| 2) SubMatrices() | $O(m \times n)$ where $m, n$ are rows & columns respectively. | space complexity is $O(m \times n)$ where $m, n$ are rows & columns respectively |
| 3) MultMatrices() | let $A_{m \times n}$ & $B_{n \times p}$. then time complexity will be $O(m \times n \times p)$ | space complexity is $O(m \times p)$ where $A_{m \times n}$ & $B_{n \times p}$. |
| 4) Transpose() | $O(m \times n)$ where $m, n$ are rows & columns of matrix | $O(m \times n)$ where $m, n$ are rows & columns of matrix. |