## Exercise - 3

- 1. Write a Java program to find the minimum and maximum integer in an array.
- 2. Write a Java program to reverse the array in place.
- 3. Write a Java program to find the second largest integer in an array.
- 4. Write a Java program to sort a given array in ascending order.
- 5. Write a Java program to print the alternate integers in an array.
- 6. Write a Java program to add two matrices.
- 7. Write a Java program to multiply two matrices.
- 8. Write a Java program to find the transpose of a given matrix.
- 9. Write a Java program to find the trace of a given matrix.
- 10. Write a Java program to print the following patterns:

```
Pattern 1:
1
       2
1
       2
1
       2
              3
1
       2
                      4
                             5
Pattern 2:
1
2
       2
3
       3
              3
4
       4
              4
                      4
                      5
              5
                             5
5
       5
```