

ISTE DSA Summer School Week 1 Assignment

1. Write a program to print “Welcome to ISTE Summer School”.
2. Write a program to reverse a given number.
3. Write a program to check if a given number is prime or composite.
4. Print the given pattern:

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

5. Print the given pattern:

```
  *
 ***
*****
*****
*****
```

6. Find the largest element in an array :

<https://www.geeksforgeeks.org/problems/largest-element-in-array4009/0>

7. Write a program to initialize a vector(C++) / ArrayList (Java) of integers.
 - Take user input to insert elements into the vector (C++) / ArrayList (Java).
 - Sort the vector (C++) / ArrayList (Java) using the inbuilt function and print the sorted vector (C++) / sorted ArrayList (Java).
 - Reverse the sorted vector (C++) / ArrayList (Java) and print it.
8. Initialize a vector(C++)/ArrayList(Java) of integers.Use an iterator to traverse and print each element in the vector/ArrayList.Use a reverse iterator(ListTerator for Java) to traverse and print each element in reverse order.