**Assessment -3**

1. **Write a program to check Armstrong using scanner?**
2. write a singleton example?
3. **write a program for string sorting with out using predefined methods?**
4. write a program for string permutations? ex:god,ogd,dog,gdo,dgo.
5. write a program for deadlock situation multithreading?
6. **write a program for file to excel? input=file,output=excel.**
7. **write a program for gender grouping into separate files ?**
8. **Write a program for array it should maintain 0's at the end and non zero's in sorting order ?**
9. **write a program for factorial of a number using recursion?**

**10. Write a program for below pattern?**

A

B B

C C

D D

C C

B B

A