**Tutorial 8**

**Implement the following programs in C++ language**

1. W.A.P. to print the squares of no. from 1 to 20 using right-justified format.
2. W.A.P. to read a list containing product name, product code, and cost interactively and produce a three column output as shown below:

NAME CODE COST

Product 1 1000 250.45

Product 2 905 95.70

…………

…………

Name and code are left-justified and the cost is right-justified with a precision of two digits. Trailing zeros are also shown.

1. W.A.P to print the output as per instruction given for inputs as shown below:

**Input Output**

33.456 Scientific notation format

184 Equivalent Hexadecimal and Octal number

1254.52 Show sign and trailing zeros

1. Write a program to create manipulator equivalent to ‘\t’, ‘Rs’ and ‘$’. Use it in the program and format the output.
2. Write a program to create user defined manipulator. Design a single manipulator to provide the following output specifications for printing float values. Use it in the program and format the output.

* 15 columns width
* 3 digit precision
* Fill unused space with ‘\*’
* Trailing zeros should be displayed