**Tutorial 3**

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

1. W.A.P. to calculate the area of circle using a function named area(). Make this function inline.
2. W.A.P. to calculate the volume of a cube using a function named cube(). Make this function inline.
3. W.A.P. that implements a function named power() that calculates x to the power y. Use a default value of 2 and 3 for y to make the function to calculate squares and cubes of x respectively.
4. W.A.P. that implements a function simple\_int() which accepts amount and number of years and calculates the simple interest with fixed rate of interest of 8.5% (use default argument for rate of interest).
5. W.A.P. to return absolute value of variable type integer and float using function overloading.
6. Create a function, plus(), which adds two values and returns their sum. Provide overload versions to work with int, float and double.
7. W.A.P. to demonstrate the concept of function overloading. Overload a function shape\_area() to calculate the area of circle, triangle, square and rectangle (Use enum and switch case).