LAB 9 Functions

**Task 1 (No Argument, No return type)**

1. Write a program that displays message “Inside Function” using functions?
2. Modify 1A use two message functions one display “inside message1” and “inside message1” call them both from main?
3. Write a program with three functions named as Brazil, Italy and Argentina call them one by one from main function?
4. Modify 1C .Call Italy function from main, call Brazil function from Italy and call Argentina function from Brazil.
5. Write a program which has three functions named shallow, deep, deeper where shallow is called by main, where as deep is called by shallow and then deeper is called by deep all messages displaying messages and in end control passing back to main ?

**Task 2 (Square)**

1. Write program that calculate square of a value using function (no arguments, no return).
2. Modify 2A, Take value from user and calculate square inside square (no arguments, no return).
3. Modify 2b, Take value from user inside main and calculate square(single argument pass to function square of type int, no return)
4. Modify task 2c and take value from user inside main and calculate its square(by passing single argument and return result back to main)
5. Modify task2d and take a float value from user and calculate square using inline function.
6. Modify task 2e, Try to define two functions using same name but pass them argument with different variable type see results?

**Task 3 (Raise to Power)**

1. Write a program using function that calculates raise to power of any value and return result to main. (argument and return type should be double as well).
2. Modify 3A for negative powers as well.

**Task 4 (Area of Ring)**

1. Write a program calculate area of ring using function?
2. Modify 4A, use square function to calculate radius square?
3. Modify 4b,use of #define to define a constant?

**Task 5**

1. Write a program that detects whether number is even or not using just one function on bases of return value?
2. Write program that takes two numbers from user and return greater value? (solve it on bases of return value)

**Task 6**

Design a calculator using functions

**Task 7**

1. Write a program that calculates a factorial of a number enter by a user?
2. Modify 6a, using recursion function?

**Task 8**

1. Write a task using same named variable in function1 and in main & check scope of variable?