**TRINITY INTERNATIONAL SS & COLLEGE**

**Dillibazar Height, Kathmandu, Nepal**

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**LAB WORK #1: C-Programming**

**(COMPUTER SCIENCE)**

**SUBMITTED BY: SUBMITTED TO:**

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**GRADE: XII (MA2)**

**DATE : [2023/07/13] PRAVEEN KOIRALA**

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**2. Objective**

The main objectives of the lab work are as follows:

1. To understand function and its types.
2. To understand passing arguments to a function.
3. To understand calling function and returning value from function.
4. To understand passing array as arguments to a function.
5. To understand calling function and returning value from function.
6. To understand the concept of recursion and recursive function.

**3. Theoretical Background**

Functions: A function is self-contained program, which means to do specific, well-defined task.

Function components:

1. Function prototype: To initialize a function.
2. Calling: To call a function in the main function.
3. Definition: To assign/define a function with a set of tasks.

Storage Classes:

1. Local: All the variables which you use inside a function. “auto” keyword.
2. Global: All the variables declared/used outside a function. “extern” keyword.
3. Static: Any variables those values which are not changed by default.
4. Register: any variables stored in register memory.

Recursive Function: The function which calls itself is known as recursive function.

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Q1. WAP to print the greatest value among four numbers using a function.

|  |
| --- |
| Source Code |
| Output |

Q2. WAP to Calculate Area and Perimeter of a Rectangle using function.

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| --- |
| Source Code |
| Output |

Q3. WAP to know a number is even or odd using function.

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| --- |
| Source Code |
| Output |

Q4. WAP to know a number is prime or composite using function.

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| --- |
| Source Code |
| Output |

Q5. WAP to print multiplication table of a number using function.

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| --- |
| Source Code |
| Output |

Q6. WAP to calculate y raise power to x Using Function.

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| --- |
| Source Code |
| Output |

Q7. WAP to find sum of series 1,2,3,…..200 using function.

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| --- |
| Source Code |
| Output |

Q8. WAP to input elements of an array and print the sum of elements.

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| --- |
| Source Code |
| Output |

Q9. WAP to find sum of two matrices using function.

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| --- |
| Source Code |
| Output |

Q10. WAP to sort numbers in an array using a function.

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| --- |
| Source Code |
| Output |

Q11. WAP to sort numbers in an array using a function.

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| --- |
| Source Code |
| Output |

Q12. WAP to sort ‘n’ number of strings using function.

|  |
| --- |
| Source Code |
| Output |

Q13. WAP to find factorial value of a number using recursive function.

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| --- |
| Source Code |
| Output |

Q14. WAP to print Fibonacci series 1, 1, 2, 3 … 100 using recursive function.

|  |
| --- |
| Source Code |
| Output |