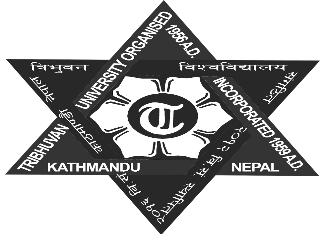
**TRIBHUVAN UNIVERSITY**

**INSTITUTE OF ENGINEERING**

**Lab Sheet #2**

**PURWANCHAL CAMPUS**

DHARAN-8

**Submitted by:** **Submitted to:**

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Roll No: **PUR075BCT017** Electronics & Computer

Faculty: BCT Engineering

Group: I/I ‘A’

Date: ….......................... Checked by: ……………………….

**Title:**

Write a program to take input of name, roll no., and marks obtained by a student in five subjects each have its 100 full marks and displays the name, roll no, with percentage score secured.

**Objective:**

* To be familiar with different data types, operation and expression in C

**Problem Analysis:**

Based on problem, it is required to get the input of name, roll no., and marks in 5 subjects of a student. The program should display the name, roll no., and percentage of marks secured by that student as output. The input variables shall be: name, roll no., msub1, msub2, msub3, msub4, msub5. We need to calculate percentage of marks obtained. So the variable ‘score’ holds the percentage to be displayed.

Percentage of marks obtained = ((total marks on 5 subjects)/500) \*100

Hence, msum=(msum1+msum2+msum3+msum4+msum5); score=(msum/500)\*100

|  |  |  |  |
| --- | --- | --- | --- |
| **Input variables** | **Processing variables/calculations** | **Output variables** | **Necessary header files/functions/macros** |
| name (char type)  rollno (int)  msub1, msub2, msub3,  msub4, msub5 (float) | msum (float) | name(char type)  rollno (int)  score(float) | stdio.h  coino.h  scanf()  printf() |

**Algorithm:**

1. Start
2. Define variables: name, rollno, msub1, msub2, msub3, msub4, msub5, msub, score
3. Take input from keyboard for all the input variables
4. Calculate the sum of marks of 5 subjects and also calculate the percentage score as:

msum=msub1+msub2+msub3+msub4+msub5;

1. score=(msum/500)\*100;
2. Display the name, rollno, and percentage score.
3. Stop

**Flowchart:**

Start

Define variable: char name[20]; int rollno;float msub1,msub2,msub3,msub4,msub5,msum,score

End

Print:name,rollno,score

msum=(msum1+msum2+msum3+msum4+msum5);

score=(msum/500)\*100

Read name,rollno,msub1,msub2,msub3,msub4,msub5

**Discussion & Conclusion:**

In this lab of C programming, based on the focused objective(s) to understand about C data types with formatted input/output functions, the additional lab exercise made me more confident towards the fulfilment of the objectives.