



EASTERN UNIVERSITY, SRILANKA  
DEPARTMENT OF MATHEMATICS  
EXTERNAL DEGREE EXAMINATION IN SCIENCE-2008/2009  
FIRST YEAR, FIRST SEMESTER (July./ Aug., 2010)  
**EXTCS 152 – PRACTICAL WORK ON CS 103**  
(Proper & Repeat)

Time : 2 Hours

Declare a structure for a staff record consisting of the following fields:

name - a string of maximum length 30  
staff\_Id - an integer  
basic\_Salary - float  
allowance - float  
net\_Salary -float

Write a program to keep records for 10 staff members including functions to do the following Task:

- Read the necessary data from the keyboard for 10 staff members.
- Calculate the allowance based on the following criteria:
  - If  $\text{basic\_Salary} \leq 15000$ ,  $\text{allowance} = 3000$
  - If  $15000 < \text{basic\_Salary} \leq 25000$ ,  $\text{allowance} = 18\%$  of  $\text{basic\_Salary}$
  - If  $\text{basic\_Salary} > 25000$ ,  $\text{allowance} = 15\%$  of  $\text{basic\_Salary}$ .
- Calculate the Net salary for each staff, where,  
$$\text{net\_Salary} = \text{basic\_Salary} + \text{allowance}$$
- Display the staff's payment details (as shown in the sample run below).
- Display the Name and Staff ID of the highest and lowest net salaried staff.

The sample run of the program is illustrated below: (user inputs are shown in **bold**)

Enter staff name: **Ravi**  
Enter staff id: **1001**  
Enter staff basic salary: **19325.46**

Enter staff name: **Raman**  
Enter staff id: **1002**  
Enter staff basic salary: **13250.00**

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Enter staff name: **Raja**  
Enter staff id: **1010**  
Enter staff basic salary: **28014.75**

Name	ID	basic_salary	Allowance	Net_Salary
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Ravi	1001	19325.46	3478.58	22804.04
Raman	1002	13250.00	3000	16250.00
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.	.	.	.	.
.	.	.	.	.
Raja	1010	28014.75	4202.21	32216.96

The highest salary: Raja (Staff ID-1010)  
The Lowest Salary: Raman (Staff ID-1002)

Note:

1. Save all your works with the file name 'indexNo.cpp' (e.g. exbs999.cpp or exphy999.cpp) in the given storage device.
2. The marks will be awarded for the structure of the programme code, its style and readability, use of suitable comments, choice of meaningful names for the identifiers, its correctness and efficiency.