National College of Computer Studies (NCCS)

BIM Second Semester: Structure programming lab sheet 9

1. Write a program to store and print the roll_no, name, age and marks of a student using structures.
2. WAP to create a structure named Employee having members emp_id, emp_name, emp_post, and emp_salary. Read the data of an employee and display it on screen.
3. Modify question number 2 to read information of 10 Employees and display them.
4. Modify question number 3 and display the information of Employees having salary greater than 15000.
5. Write a program to store the roll no. (starting from 1), name and age of 5 students and then print the details of the student whose roll no. is 2.
6. Create a structure named Date having day, month and year as its elements. Store the current date in the structure. Now add 45 days to the current date and display the final date.
7. The given below is the data of average rainfall of the first half year of five different cities. You are to write a program, which performs the following tasks.

"Rainfall of the first half of year"

	Jan	Feb	Mar	Apr	May	Jun
Kathmandu	32	42	45	23	39	12
New Delhi	12	23	12	43	23	23
Bankok	23	24	12	32	52	31
Tokyo	30	42	45	23	39	12
Colombo	12	34	24	43	23	23

   i) Create a user defined structure that can store the above data
   ii) Display this data exactly the same format as given

8. Write a program that creates a struct called student with following components as building blocks.

```
Struct student
    {
        int roll;
        char name[20];
        char s_name[20];
        int marks[5];
        int total;
    };
```

Now read following data to your variables

Roll	Name	C	English	Math	Management	Sanskrit
1	Anup KC	100	98	80	70	50
2	Pradhanta Bhandari	100	99	85	75	60
3	Sabin Ghalan	100	99	82	76	55
4	Ruby KC	100	95	79	75	45
5	Nabaraj Pandey	100	96	79	73	60

a) Display the data in exact format as given above.
b) Find the total of each student
c) Display them in Descending order in a format similar to above
d) Find average marks in Programming
e) Find the percentage of Nabaraj
f) Display the name of Topper
g) Find the average marks of student.

9. Write a structure to store the name, account number and balance of customers (more than 10) and store their information.
   a. Write a function to print the names of all the customers having balance less than $200.
   b. Write a function to add $100 in the balance of all the customers having more than $1000 in their balance and then print the incremented value of their balance.
10. Write a function to add two dates entered by user. Make a structure named Date to store the elements day, month and year to store the dates. Pass the structure into function.
11. Write a structure to store the names, salary and hours of work per day of 10 employees in a company. Write a program to increase the salary depending on the number of hours of work per day as follows and then print the name of all the employees along with their final salaries.

Hours of work per day	**8**	**10**	**>=12**
Increase in salary	**$50**	**$100**	**$150**

12. Create an union name with members firstname, middlename and lastname. Write a program that inputs values and store in members. Also displays the values of members.