

## Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology (Autonomous Institute Affiliated to Mumbai University) [Knowledge is Nectar]

## **ACADEMIC YEAR 2021-22**

Class: F.Y. B. Tech. (Comp.) -B Semester: I Course: PSIP Course In charge: Nikahat Mulla

## List of Problems for practice-Set VI -Structures and Unions

- 1. Write a program to store and print the roll no., name, age and marks of a student using structures.
- 2. 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 with roll no. 2.
- 3. Write a program to store and print the roll no., name, age, address and marks of 15 students using structure.
- 4. Write a program to add two distances in inch-feet using structure. The values of the distances is to be taken from the user.
- 5. Enter the marks of 5 students in Chemistry, Mathematics and Physics (each out of 100) using a structure named Marks having elements roll no., name, chem\_marks, maths\_marks and phy\_marks and then display the percentage of each student.
- 6. Write a structure to store the roll no., name, age (between 11 to 14) and address of students (more than 10). Store the information of the students.
- 1 Write a function to print the names of all the students having age 14.
- 2 Write another function to print the names of all the students having even roll no.
- 3 Write another function to display the details of the student whose roll no is given (i.e. roll no. entered by the user).
- 7. Write a program to compare two dates entered by user. Make a structure named Date to store the elements day, month and year to store the dates. If the dates are equal, display "Dates are equal" otherwise display "Dates are not equal".
- 8. Records for a set of employees include name, address, age, etc. but also information about whether they receive a weekly or monthly salary; the amount received per week or monthly salary; the amount received per week or per month is also present. Write a program which processes a set of these records and outputs
- a. The amount of the weekly wage bill
- b. The amount of the monthly wage bill excluding wages paid under (a) above
- c. The total yearly wage bill.
- d. The number of employees being paid by each means

9. Write a program which creates a structure representing a French/ English and an English/ French dictionary. There should be no duplication of words and efficient translation should be possible both ways. Your program must then return a French word corresponding to the given English word if it is found in the dictionary otherwise, must output a suitable message.

**Note:** Write user defined functions in all programs.