**Programming in ‘C’ (Assignment 3)**

Student Name : ………………………………. Enr. No. : ………………………….. Batch : …....

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| --- | --- | --- |
| **Q.No.** | **Programs** | **Checked** |
|  | **Structure/ Union** |  |
|  | Make an appropriate structure for any student. Also accept one record and print it. |  |
|  | Make a structure for employee data, also accept records and print in tabular format.: *Hint :*   |  |  |  | | --- | --- | --- | | ***Name*** | ***Code*** | ***Salary*** | | *Mohan* | *E101* | *8000* | | *Sohan* | *E102* | *7000* | | *Raj* | *E103* | *9000* | | *Ramesh* | *E104* | *5000* | | *Suresh* | *E105* | *4000* | |  |
|  | Write a menu driven program using above structure for :   1. Search the employee name and its salary on the basis of its code. 2. Delete the record 3. Modify the record |  |
|  | Make a structure and union having same data members, print the size of both using *sizeof()* and observe the output. |  |
|  | **Pointers** |  |
|  | WAP for swap the value of two variables using pointers. |  |
|  | WAP to accept 5 numbers in any array and print the value using pointer. |  |
|  | WAP to print the address of any char, int and float array and observe the result. |  |
|  | **Enumeration** |  |
|  | Program to find whether “week day” or “week end” using *enum*. |  |
|  | Program to return the number of days in a month using *enum* |  |
| **Bit Field** | | |
|  | Write a function that prints out an 8-bit (unsigned char) number in binary format. |  |
|  | **User Defined Function** |  |
|  | WAP to display your name of the screen using function. |  |
|  | WAP for multiplication table generation using function. |  |
|  | WAP to calculate the sum to two numbers using function. |  |
|  | WAP calculate the area of rectangle, area of square and area of circle using function. |  |
|  | WAP to find the maximum from two numbers |  |
|  | WAP to calculate the factorial of any number using function. |  |
|  | WAP to print the n elements of Fibonacci series. |  |
|  | WAP to check the entered number is prime or not. |  |
|  | Make a function to search the specific elements from array. |  |
|  | Make a function to show the concept of call by value. |  |
|  | Make a function to show the concept of call by address. |  |
| **Recursion** | | |
|  | WAP to display 10 numbers on the screen without using any loop. |  |
|  | WAP to calculate the factorial of any number using recursion. |  |
|  | WAP to print the n elements of Fibonacci series using recursion. |  |
|  | **Preprocessor: #include & #define** |  |
|  | WAP having macros of clrscr() and getch(). |  |
|  | WAP having macro for calculating the cube of any number. |  |
|  | Prepare a macro to find the maximum from given two numbers. |  |
|  | Prepare a macro to find the maximum from given three numbers. |  |
|  | **Dynamic Memory Allocation** |  |
|  | WAP to dynamically create any integer variable, store the value, print the value and free from the memory.  *[Hint : using malloc() & free()]* |  |
|  |
|  | WAP to dynamically any array with size N. Accept the values, print the values and free from the memory.  *[Hint : ‘N’ a number, entered by user]* |  |
|  |
| **Data File handling** | | |
|  | WAP to accept the stream of characters and store in file named *data.dat* using *getc()*. |  |
|  | WAP to read the already existing file named *“data.data”* using *putc()* and print on the screen |  |
|  | WAP to store five names is any file and print it. |  |
|  | WAP to store the records of employee in file ‘emp.dat’ and read it.  (As per question no.2) |  |
|  | Write a menu driven program for following : *file structure emp (name, code, salary)*   1. Create a new file 2. View all records 3. Search Record 4. Delete Record 5. Edit Record 6. Exit |  |

1. Merge two files I a single file.
2. Copy one file to another file in reverse order.
3. Remove all the comments of current c file.
4. A paragraph present in a file, by mistake there are more than one space entered at some places

between two word ,remove all such extra spaces and create a new file.