Assignment-9

1. Define 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.

2. Define a structure to store the name, account number and balance of customers (more than 10) and store their information.
   i. Write a function to print the names of all the customers having balance less than $200.
   ii. 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.

3. Write a program to compare two dates entered by the 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".

4. Let us work on the menu of a library. Create a structure containing book information like accession number, name of author, book title and flag to know whether book is issued or not. Create a menu in which the following can be done.
   1 - Display book information
   2 - Add a new book
   3 - Display all the books in the library of a particular author
   4 - Display the number of books of a particular title.

5. Write a program that concatenates two strings without changing either one and returns a pointer to the new string. (Do not use strcat since it modifies one of the strings passed to it).

6. Define a function: int *create array(int n, int initial value) which returns a pointer to a dynamically allocated array with n members, each of which is initialized to initial value. The return value should be NULL if the array can't be allocated.

7. Define a function duplicate that uses dynamic storage allocation to create a copy of a string and returns pointer to it. Return a null pointer if the memory allocation fails.