Data Structures-CSA0396

7. Write a C program to find Fibonacci series using Recursion.

Coding:

```
#include<stdio.h>
#include<stdlib.h>
int A[50],n;

void Array_insertion()
{
   int i,ele=100,pos=2;
   printf("Enter the n");
   scanf("%d",&n);

   printf("Enter the Array element");
   for(i=0;i<n;i++)
      scanf("%d",&A[i]);

   for(i=n;i>=pos;i--)
      A[i]=A[i-1];
   A[pos]=ele;

}
```

```
void Array_deletion()
{
   int i,pos=4;
   for(i=pos;i<n;i++)
      A[i]=A[i+1];

}

void Array_display()
{
   int i;
   for(i=0;i<=n;i++)
      printf("%d\t",A[i]);
}


int main()
{
   int cho;
   do{
      printf("\n** Main Manu *\n");
      printf("\n1.Insertion\n2.Deletion\n3.Display\n4.Exit\n");
      printf("Enter your Choice ?");
      scanf("%d",&cho);
```

```
    switch(cho)
    {
       case 1:Array_insertion(); break;
       case 2:Array_deletion(); break;
       case 3:Array_display(); break;
       case 4:exit(0);
       default: printf("\nEnter the choice between 1 to 4!!!!");
    }
   }while(cho>0 && cho<=4);

}
```

Output:

```
** Main Manu *

1.Insertion
2.Deletion
3.Display
4.Exit
Enter your Choice ?1
Enter the n5
Enter the Array element2
3
4
5
6

** Main Manu *

1.Insertion
2.Deletion
3.Display
4.Exit
Enter your Choice ?3
2       3       100     4       5       6
** Main Manu *
```