Week: 13

13) a) Write a C program to Display array elements using calloc( ) function.

AIM:
To write a C program to find sum of n elements entered by user. To perform this program, allocate memory dynamically using calloc() function.

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
  int i, n;
  int *a;

  printf("Number of elements to be entered:");
  scanf("%d",&n);

  a = (int*)calloc(n, sizeof(int));
  printf("Enter %d numbers:\n",n);
  for( i=0 ; i < n ; i++ )
  {
    scanf("%d",&a[i]);
  }

  printf("The numbers entered are: ");
  for( i=0 ; i < n ; i++ )
  {
    printf("%d ",a[i]);
  }

  return(0);
}
```

Output:

```
Number of elements to be entered:3
Enter 3 numbers:
22
55
14
The numbers entered are: 22 55 14
```

Record at least 3 results

Signature of faculty with Date

13) b) Write a C Program to Calculate Total and Percentage marks of a student using structure.

Program:

```
#include<stdio.h>
#include<conio.h>
struct student
{
        int rl;
        char nm[20];
        int m1;
        int m2;
        int m3;
        int t;
        float per;
};
void main()
{
  struct student a;
  clrscr();
  printf(" Enter RollNo, Name amd three sub marks\n");
  scanf("%d%s%d%d%d",&a.rl,&a.nm,&a.m1,&a.m2,&a.m3);
  a.t=a.m1+a.m2+a.m3;
  a.per=a.t/3.0;
  printf("rollno=%d\n",a.rl);
  printf("Name=%sk\n",a.nm);
  printf("m1=%d\n",a.m1);
  printf("m2=%d\n",a.m2);
  printf("m3=%d\n",a.m3);
  printf("total=%d\n",a.t);
  printf("per=%f\n",a.per);
  getch();
}
```

Input:

```
Enter RollNo, Name and three sub marks
          12    rama          30 40  50
```

Output:

```
rollno=12
Name=rama
m1=30
m2=40
m3=50
total=120
per=40.000000
```