Aim:

Write a C program to create dynamic memory allocation using calloc()

Source Code:

calloc.c

```
#include <stdio.h>
#include <stdlib.h>
int main() {
   int *p,n,sum=0,i,j=1,a[10];
   printf("Enter the number of elements: ");
   scanf("%d",&n);
   p=(int*)calloc(n,sizeof(int));
   for(i=0;i<n;i++)
      printf("Enter element %d: ",j);
      scanf("%d",p+i);
      sum=sum+*(p+i);
      j++;
   }
   printf("The sum of the array is %d.\n",sum);
    // get number of elements from user
    // allocate memory for array using calloc()
    // check if memory allocation was successful
    // get input values for array from user
    // perform operation on array values
    // print out the sum
}
```

Execution Results - All test cases have succeeded!

Test Case - 1 User Output Enter the number of elements: 5 Enter element 1: 1 Enter element 2: 2 Enter element 3: 3 Enter element 4: 4 Enter element 5: 5 The sum of the array is 15.

User Output
Enter the number of elements: 4
Enter element 1: 11
Enter element 2: 22
Enter element 3: 33
Enter element 4: 44
The sum of the array is 110.