S.No: 3	Exp. Name: ***C program to create dynamic memory allocation using calloc( )***	Date:2023-06-10

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 a[10],n,i,*ptr,sum=0;
   printf("Enter the number of elements: ");
   scanf("%d",&n);
   ptr=(int*)calloc(n,sizeof(int));
   if(ptr==NULL)
   {
      printf("\nRequired memory is not allocated");
   }
   else
   {
      for(i=0;i<n;i++)
      {
         printf("Enter element %d: ",i+1);
         scanf("%d",&a[i]);
      }
      for(i=0;i<n;i++)
      {
         sum+=a[i];
      }
      printf("The sum of the array is %d.",sum);
      free(ptr);
}
printf("\n");
}
```

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.

Test Case - 2

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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.