2022-2026-CSE-B

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;
printf("Enter the number of elements: ");
scanf("%d",&n);
for(i=1; i<=n; i++)
   printf("Enter element %d: ",i);
   scanf("%d",p+i);
   sum += *(p+i);
}
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 of the array values
    // free memory allocated for array
}
```

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
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.