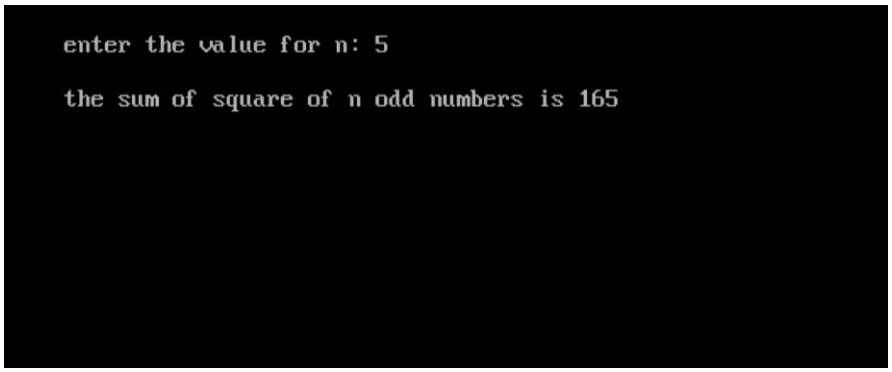
PROGRAM 1: Develop a program to calculate the sum of squares of first n odd numbers.

Input:

```
#include <stdio.h>
#include <conio.h>
int main()
{
 int num, i, sum=0;
 clrscr();
 printf("\nenter the value for n: ");
 scanf("%d", &num);
 for(i=1; i<=num; i++)
 {
 sum +=(2*i-1)*(2*i-1);
 }
 printf("\nthe sum of square of n odd numbers is %d\n", sum);
 getch();
 return(0);
}
```

Output:



PROGRAM 2: Develop a C program to interchange the largest and smallest number in the given array.

Input:

```
#include <stdio.h>
#include <conio.h>
int main()
{
 int a[20], b[20], n, sml=0, lar=0, i, spos, lpos, temp;
 clrscr();
 printf("enter the number of terms: ");
 scanf("%d", &n);
 printf("\nenter the terms; \n");
 for(i=0; i<n; i++)
 {
  scanf("%d", &a[i]);
  b[i]=a[i];
 }
 sml=a[1];
 for(i=0; i<n; i++)
 {
  if(a[i]<=sml)
  {
   sml=a[i];
   spos=i;
  }
  if(lar<=a[i])
  {
   lar=a[i];
   lpos=i;
```

```
 }
}
temp=a[spos];
a[spos]=a[lpos];
a[lpos]=temp;
printf("\nthe array entered are: \n");
for(i=0; i<n; i++)
printf("%d \t", b[i]);
printf("\nthe array after interchanging the largest and the smallest element: \n");
for(i=0; i<n; i++)
printf("%d \t",a[i]);
getch();
return (0);
}
```

Output: