

LAB-6-EVALUATION PROGRAMS

PROGRAM-1- SUM OF SQUARES OF ODD NUMBERS

```
// SUM OF SQUARES OF ODD NUMBERS
#include <stdio.h>

int main()
{
    int i, n, sum=0;
    printf("Enter any number = ");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    {
        sum += (2*i - 1) * (2*i - 1);
    }
    printf("Sum of square of odd numbers = %d", sum);
    return 0;
}
```

OUTPUT:

"C:\Users\jhana\OneDrive\Documents\C Programming\C Programming\Sum of square of odd numbers.exe"

```
Enter any number = 10
Sum of square of odd numbers = 1330
Process returned 0 (0x0)   execution time : 14.387 s
Press any key to continue.
```

"C:\Users\jhana\OneDrive\Documents\C Programming\C Programming\Sum of square of odd numbers.exe"

```
Enter any number = 5
Sum of square of odd numbers = 165
Process returned 0 (0x0)   execution time : 5.092 s
Press any key to continue.
```

PROGRAM-2-INTERCHANGING THE SMALLEST AND LARGEST NUMBERS IN A GIVEN ARRAY

```
// INTERCHANGING THE SMALLEST AND LARGEST NUMBER IN A GIVEN ARRAY
#include<stdio.h>
int main( )
{
    int a[10],b[10],n,small=0,large=0,i,smallest_pos,largest_pos,temp;
    printf(" Enter the numbers of elements = ");
    scanf("%d",&n);
    printf("\n Enter the elements = ");
    for (i=0;i<n;i++)
    {
        scanf("%d",&a[i]);
        b[i] = a[i];
    }
    small = a[0];
    for (i=0;i<n;i++)
    {
        if (a[i] <= small )
        {
            small = a[i];
            smallest_pos = i;
        }
        if (large <= a[i] )
        {
            large = a[i];
            largest_pos = i;
        }
    }
    temp = a[smallest_pos];
    a[smallest_pos] = a[largest_pos];
    a[largest_pos] = temp;

    printf("\n The entered array = ");
    for (i=0;i<n;i++)
        printf(" %d \t",b[i]);

    printf("\n The Array after interchanging the largest and smallest element = ") ;
    for (i=0;i<n;i++)
        printf(" %d \t",a[i]);
    return 0;
}
```

OUTPUT:

"C:\Users\jhana\OneDrive\Documents\C Programming\C Programming\interchange small and large.exe"

```
Enter the numbers of elements = 5

Enter the elements = 1 2 3 4 5

The entered array = 1      2      3      4      5
The Array after interchanging the largest and smallest element = 5      2      3      4      1
Process returned 0 (0x0)   execution time : 13.638 s
Press any key to continue.
```

"C:\Users\jhana\OneDrive\Documents\C Programming\C Programming\interchange small and large.exe"

```
Enter the numbers of elements = 10

Enter the elements = 1 2 3 4 5 6 7 8 9 10

The entered array = 1      2      3      4      5      6      7      8      9      10
The Array after interchanging the largest and smallest element = 10      2      3      4      5      6      7
8      9      1
Process returned 0 (0x0)   execution time : 10.086 s
Press any key to continue.
```

