TASK1:

```c
#include <stdio.h>

int square(int n){

    return n*n;
}

int main(){
    int n;
    printf("Enter a number:");
    scanf("%d",&n);

int result=square(n);
printf("the square of number:%d",result);
return 0;


}
```

```
Enter a number:6
the square of number:36
-----------------------------------
Process exited after 4.883 seconds with return value 0
Press any key to continue . . .
```

TASK 2:

```c
#include <stdio.h>

int main(){

    int arr[5];
    int i;

for(i=0;i<5;i++){
    printf("Enter 5 numbers:");
    scanf("%d",&arr[i]);
}
int *p=arr;
for(i=0;i<5;i++){
    printf("Address of arr[%d]:%d,value:%d\n",i,(p+i),*(p+i));
}
return 0;


}
```

```
Enter 5 numbers:5
Enter 5 numbers:4
Enter 5 numbers:3
Enter 5 numbers:6
Enter 5 numbers:8
Address of arr[0]:6487536,value:5
Address of arr[1]:6487540,value:4
Address of arr[2]:6487544,value:3
Address of arr[3]:6487548,value:6
Address of arr[4]:6487552,value:8

-----------------------------------
Process exited after 4.646 seconds with return value 0
Press any key to continue . . .
```

TASK 3:

```c
1    #include <stdio.h>
2    int main(){
3
4
5      int Matrix[2][3]={{20,49,58},{22,45,57,30}};
6      int sum=0;
7      int maxValue=Matrix[0][0];
8
9      const int rows=2;
10     const int col=3;
11     const int total_elements=rows*col;
12     printf("\n");
13     int b;
14     for(b=0;b<rows;b++){
15         int c;
16         for(c=0;c<col;c++){
17             int current_el=Matrix[b][c];
18             printf("%4d",current_el);
19
20             sum=sum+current_el;
21             if(current_el>maxValue){
22             maxValue=current_el;
23             }
24         }
25
26
27     }
28     printf("\n");
29     }
30     float averageValue=(float)sum/total_el;
```
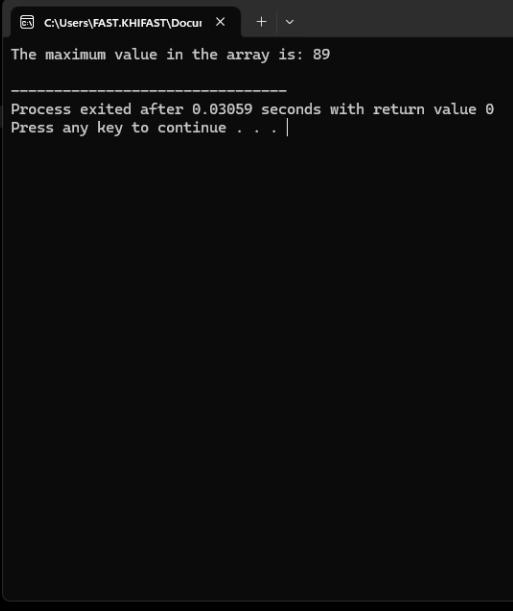
```c
    }
    printf("\n");
    }
    float averageValue=(float)sum/total_el;

    printf("total sum:%d\n",sum);
    printf("Average Value sum:%.2f\n",averageValue);
    printf("Max value :%d\n",max);


        return 0;
}
```

TASK 4:

```c
#include <stdio.h>


int findMax(int arr[], int size) {
    int max = arr[0];
    int i;

    for ( i = 1; i < size; i++) {
        if (arr[i] > max) {
            max = arr[i];
        }
    }

    return max;
}

int main() {
    int arr[] = {12, 45, 7, 89, 23, 56, 78};
    int size = sizeof(arr) / sizeof(arr[0]);

    int highest = findMax(arr, size);

    printf("The maximum value in the array is: %d\n", highest);

    return 0;
}
```

```
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The maximum value in the array is: 89

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Process exited after 0.03059 seconds with return value 0
Press any key to continue . . .
```