

## Q\_NO:1

```
#include<stdio.h>
void swap(int*ptr_1, int*ptr_2);
int main() {
    int num1,num2;
    printf("Type a number_1: ");
    scanf("%d",&num1);
    printf("Type number_2: ");
    scanf("%d",&num2);
    swap(&num1, &num2);
    printf("\nThe numbers are swapped!!!\n");
    printf("Now, number_1: %d\n",num1);
    printf("Now, number_2: %d\n",num2);
    return 0;
}
void swap(int*ptr_1, int*ptr_2){
    int t=*ptr_1;
    *ptr_1=*ptr_2;
    *ptr_2=t;
}
```

Type a number\_1: 4

Type number\_2: 8

The numbers are swapped!!!

Now, number\_1: 8

Now, number\_2: 4

PS C:\Users\Lenovo\Desktop\C world>

## Q\_No:2

```
void reverse(char *str);
#include <stdio.h>
#include <string.h>

int main() {
    char str_[70];

    printf("Enter the sentence: ");
    fgets(str_,70,stdin);

    reverse(str_);
    printf("\nThe resultant sentence is: %s",str_);
    return 0;
}

void reverse(char *str_){
    int length= strlen(str_);
    for(int i=0;i<(length/2);i++){
        char res=str_[i];
        str_[i]=str_[(length-1)-i-1];
        str_[(length-1)-i-1]=res;
    }
}
```

PS C:\Users\Lenovo\Desktop\C world> ./a.exe

Enter the sentence: i am a palindrome "eve"

The resultant sentence is: "eve" emordnilap a ma i

### Q\_NO:3

```
#include <stdio.h>
int main(){
    int num,i;

    printf("Enter the number of elements of array: ");
    scanf("%d", &num);
    int array[num];
    int *ptr=&array[0];
    for(i = 0; i<num; i++) {
        printf("Enter the elements of your array:");
        scanf("%d", (ptr+i));
        for(i = 0; i<num; i++) {
            printf("the element at index %d is: %d\n",i,*(ptr+i));
        }
        scanf("%d", (ptr+i));
        return 0;
    }
```

```
Enter the elements of your array:8
Enter the elements of your array:0
Enter the elements of your array:4
Enter the elements of your array:5
the element at index 0 is: 1
the element at index 1 is: 8
the element at index 2 is: 0
the element at index 3 is: 4
the element at index 4 is: 5
```

## Q\_NO:4

```
#include<stdio.h>
int main()
{
    int array[]={0,1,3,5,7,9,6,8,2,11};
    int to_find=9;
    int *ptr=&array[0];
    for(int i=0;i<9;i++){
        if(*(ptr)==to_find){
            printf("Element found!!! %d",*(ptr));
            return *ptr;
        }
        else{
            ptr++;
        }
    }
    return 0;
}
```

```
PS C:\Users\Lenovo\Desktop\C world> ./a.exe
Element found!!! 9
```

## Q\_NO:5

```
#include <stdio.h>
void Add_matrix(int *array1, int *array2, int *array3, int rows, int col);
void Print_matrix(int *array3, int rows, int col);
int main() {
    int array1[3][2] = {{3, 3}, {1, 2}, {7, 8}};
    int array2[3][2] = {{3, 3}, {1, 2}, {7, 8}};
    int array3[3][2];
    int rows = 3;
    int col = 2;
    Add_matrix(&array1[0][0], &array2[0][0], &array3[0][0], rows, col);
    Print_matrix(&array3[0][0], rows, col);
    return 0;
}
void Add_matrix(int *array1, int *array2, int *array3, int rows, int col) {
    int i, j;
    for (i = 0; i < rows; i++) {
        for (j = 0; j < col; j++) {
            *(array3 + i * col + j) = *(array1 + i * col + j) + *(array2 + i * col + j);
        }
    }
}
void Print_matrix(int *array3, int rows, int col) {
    int i, j;
    for (i = 0; i < rows; i++) {
        for (j = 0; j < col; j++) {
            printf("%d ", *(array3 + i * col + j));
        }
        printf("\n");
    }
}
```

6 6

2 4

14 16

PS C:\Users\Lenovo\Desktop\C world>