

Reversing an Array

```
#include<stdio.h>
#include<stdlib.h>
struct Array
{
    int A[10];
    int size;
    int length;
};

void Display(struct Array arr)
{
    int i;
    printf("\nElements are\n");
    for(i=0;i<arr.length;i++)
        printf("%d ",arr.A[i]);
}

void swap(int *x,int *y)
{
    int temp=*x;
    *x=*y;
    *y=temp;
}

void Reverse(struct Array *arr)
{
    int *B;
    int i,j;

    B=(int *)malloc(arr->length*sizeof(int));
    for(i=arr->length-1,j=0;i>=0;i--,j++)
        B[j]=arr->A[i];
    for(i=0;i<arr->length;i++)
        arr->A[i]=B[i];
}

void Reverse2(struct Array *arr)
{
    int i,j;
    for(i=0,j=arr->length-1;i<j;i++,j--)
    {
        swap(&arr->A[i],&arr->A[j]);
    }
}

int main()
{
```

```
    struct Array arr1={{2,3,9,16,18,21,28,32,35},10,9};  
    Reverse(&arr1);  
    Display(arr1);  
    return 0;  
}
```