Data Structures and Algorithms Essential Program

DAY-3 | ASSIGNMENT **email: pavanibhavya77@gmail.com**

1.)Write the program for deleting an element from the beginning and from any position.

Sol.)

```
#include <stdio.h>
int main(void) {
	int pos,choice,i,n,a[10];
	printf("enter size");
	scanf("%d",&n);
	printf("enter array elements");
	for(i=0;i<=n;i++){
		scanf("%d",&a[i]);
	}
	while(1){
		printf("menu\n");
		printf("1.delete_pos\n2.delete_beg\n");
		printf("enter choice:");
		scanf("%d",&choice);
		switch(choice){
			case 1:printf("enter pos");
		  scanf("%d",&pos);
		  for( i=pos;i<n-1;i++){
			a[i]=a[i+1];
		  }
		  n=n-1;
		  printf("deleted %d\n",a[pos]);
				break;
			case 2:for( i=0;i<n-1;i++){
		  a[i]=a[i+1];
		  }
		  n=n-1;
		  printf("deleted %d\n",a[0]);
				break;
			default:printf("wrong choice");
			    exit(0);
		}
	}
	return 0;
}
```

2.)Write the program for printing the array after rotating it k times towards left, where k would be taken as user input.

Sol.)

```
#include <stdio.h>
void lr1(int arr[], int n);
void lr(int arr[], int d, int n)
{
    int i;
    for (i = 0; i < d; i++)
        lr1(arr, n);
}

void lr1(int arr[], int n)
{
    int temp = arr[0], i;
    for (i = 0; i < n - 1; i++)
        arr[i] = arr[i + 1];
    arr[i] = temp;
}
void print(int arr[], int n)
{
    int i;
    for (i = 0; i < n; i++)
        printf("%d ", arr[i]);
}
int main()
{
    int arr[10],n,d,i;
    printf("enter size");
    scanf("%d",&n);
    for(i=0;i<n;i++){
        scanf("%d",&arr[i]);
    }
    printf("enter rotations");
    scanf("%d",&d);
    lr(arr, d, n);
    print(arr, n);
    return 0;
}
```