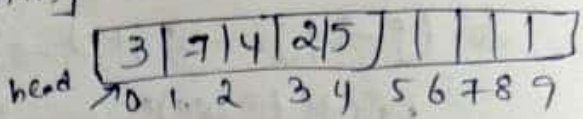
Assignment - 2

1. Write a program for deleting an element at the beginning and from any position?

Deleting at beginning




```
if (head != NULL) return {
{return
head = temp;
head = (*head) -> next
for (i=n-1; i>=0; i--)
del (temp)
}
```

Deleting at any position:

```
void delete_any ()
{ int key;
  if (heade -> link == NULL)
  {
    Pf ("\n Empty linked list. Deletion not possible.\n");
  }
  else
    {
      Pf ("\n Enter the data of node to be deleted: ");
      sf ("%d", &key);
      Ptr = head;
      while ((ptr -> link != NULL) && (Ptr -> data != key))
        {
          Ptr 1 = ptr;
          Ptr = ptr -> link;
        }
        if (ptr -> data == key) {
          Ptr1 -> link = pto -> link;
          free (Ptr);
```

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

```
void leftRotatebyOne(int arr[], int d, int n);
{
  int i;
  for(i=0; i<d; i++)
      leftRotatebyOne(arr, n);
}
void leftRotatebyOne(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 printArray(int arr[], int n)
{
  int i;
  for(i=0; i<n; i++)
      Pf("%d", arr[i]);
}
int main()
{
  int arr[] = {1,2,3,4,5,6,7};
  leftRotate(arr, 2, 7);
  PrintArray(arr, 7);
  return 0;
}
```

Output:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | → input

| 3 | 4 | 5 | 6 | 7 | 1 | 2 |