/*Write separate user defined functions to perform the following operations on a single linked list: (i) Delete from E
d (ii) Delete after a specific value (iii) Delete a specific data value (iv) Delete a node before a value */

```
#include <stdio.h>
#include <stdlib.h>
#include <malloc.h>

struct node
{
   int data;
   struct node *next;
} * start, *current, *newnode;
void deleteend();
void deleteafter();
void deletespecific();
void deletenodebefore();

void main()
{
   int x;
   newnode = (struct node *)malloc(sizeof(struct node));
   printf("Enter the value of x");
   scanf("%d", &x);
   newnode->data = x;
   newnode->next = start;
   start = newnode;
}

void deleteend()
{
   struct node *p,*q;
   p=start;
   while(p->next!=current)
   {
      p=p->next;
   }
   q=p->next;
   p->next=NULL;
   current=p;
   free(q);
}

void deleteafter()
{
   struct node *p,*q;
   int ele;
   printf("Enter the specific element");
   scanf("%d", &ele);
   while(p->data!=ele)
   {
      p=p->next;
   }
```

```
    q=p->next;
    p->next=q->next;
    free(q);
}

void deletespecific()
{
    struct node *p,*q;
    int ele;
    printf("Enter the specific element");
    scanf("%d", &ele);
    while(p->next->data!=ele)
    {
        p=p->next;
    }
    q=p->next;
    p->next=q->next;
    free(q);
}

void deletenodebefore()
{
    struct node *p,*q;
    int ele;
    printf("Enter the specific element");
    scanf("%d", &ele);
    while(p->next->next->data!=ele)
    {
        p=p->next;
    }
    q=p->next;
    p->next=q->next;
    free(q);
}
```