```
#include<stdio.h>
#include<malloc.h>
#include<stdlib.h>
typedef struct node
        int data; struct
node *next; }node; node*
createnode(int d)
{ node *nd;
        nd=(node*)malloc(sizeof(node));
        nd->data=d; nd->next=NULL;
        return nd;
}
node* createlist()
        int data; char ans;
        node
        *first,*last,*nd;
        first=NULL;
        while(1)
                printf("enter data:-");
                scanf("%d",&data); nd=
                        createnode(data)
                ; if(first==NULL)
                first=nd;
                else last->next=nd;
                last=nd;
                printf("do you want to continue(Y \setminus N)?");
                fflush(stdin);
                scanf("%c",&ans);
                if(ans!='y' && ans!='Y')
                break;
        return first;
node* common(node *11,node *12)
{ node *t1=l1; node
        *t2,*13=NULL,*nd,*last;
        while(t1!=NULL)
        { t2=l2;
                while(t2!=NULL
                )
                \{ if(t1->data==t2->data) /*if \}
                        the elements are
                        coomon*/
                        nd=createnode(t1->data);
                                /*creating node*/
                        if(13==NULL)
                                                /*if the
                                                list is
                                                empty*/
```

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13=nd;
                                  else
                                           last>next=nd;
                          last=nd;
                  t2=t2->next;
                  t1=t1->next;
        }
                 return 13;
void printlist(node *first)
        node *t=first;
        while(t!=NULL)
                 printf("%d\t",t->data);
                 t=t->next;
         }
} int
main()
{ node *start3;
        start3=common(createlist(),createlist());
        /*sending 2 user input lists and taking
        the root of the 3<sup>rd</sup> created linked list in
        start 3.*/
                                  /*printing the third list*/
        printlist(start3);
}
```