

```

1 //updating na array
2 #include<stdio.h>
3 int main()
4 {
5     int arr[30], element, num, i, location;
6
7     printf("\nEnter no of elements :");
8     scanf("%d", &num);
9     for (i = 0; i < num; i++) {
10         scanf("%d", &arr[i]);
11     }
12     printf("\nEnter the element to be inserted :");
13     scanf("%d", &element);
14
15     printf("\nEnter the location");
16     scanf("%d", &location);
17     //Create space at the specified location
18     for (i = num; i >= location; i--) {
19         arr[i] = arr[i - 1];
20     }
21     num++;
22     arr[location - 1] = element;
23     //Print out the result of insertion
24     for (i = 0; i < num; i++)
25         printf("%d", arr[i]);
26
27     return (0);
28 }

```

] left shifting array in dt.c

```
1 //Left shift na AARRAY
2 #include<stdio.h>
3 int main()
4 {
5     int A[5],i;
6     printf("ente the elemtas in an array");
7     for(i=0;i<5;i++)
8     {
9         scanf("%d",&A[i]);
10    }
11
12    int temp=A[5];
13    for(i=5;i<0;i--)
14    {
15        A[i]=A[i-1];
16        A[0]=temp;
17    }
18    for(i=0;i<5;i++)
19    {
20
21        printf("%d",A[i]);
22    }
23 }
```

```
search elem. in list.cpp
1 //create display nad search element in linked list
2 #include<stdio.h>
3 #include<stdlib.h>
4 #include<conio.h>
5 struct node
6 {
7     int data;
8     node *next;
9 };
10 struct node *head=NULL;
11 void create()
12 {
13     char o;
14     struct node * tail=NULL,*ptr;
15     do{
16         ptr=(node*)malloc(sizeof(node));
17         if(tail==NULL)
18         {
19             head=ptr;tail=ptr;
20         }
21         else
22         {
23             tail->next=ptr;
24             tail=ptr;
25             tail->next=NULL;
26         }
27         printf("enter no\n");
28         scanf("%d",&ptr->data);
29         printf("press n for next node\n");
30     }while(o!='n');
```

search elem. in list.cpp

```
28         scanf("%d",&ptr->data);
29         printf("press y for next node\n");
30         o=getch();
31     }
32     while(o=='y');
33 }
34
35 void display()
36 {node * temp;
37   temp=head;
38   printf("the list is\n");
39   while(temp!=NULL)
40   {
41       printf("%d",temp->data);
42       temp=temp->next;
43   }
44 }
45
46 void search()
47 {node *temp;
48   temp=head;
49   int tem,count=0;
50   printf("\nEnter the no. to find=");
51   scanf("%d",&tem);
52
53
54   while(temp!=NULL)
55   {
```

search elem. in list.cpp

```
49     int tem,count=0;
50     printf("\nEnter the no. to find=");
51     scanf("%d",&tem);
52
53
54     while(temp!=NULL)
55     {
56         if(temp->data==tem)
57         {
58             temp=temp->next;
59             ++count;
60             printf("\nelement found in node %d",count);
61         }
62     }
63     else
64     {
65         temp=temp->next;
66         ++count;
67         printf("\nelement not found in node %d",count);
68     }
69 }
70
71 main()
72 {
73     create();
74     display();
75     search();
76 }
77
```

```

2  #include<stdio.h>
3  int main()
4  {
5      int A[5],i;
6      printf("enter array");
7      for(i=0;i<5;i++)
8      {
9          scanf("%d",&A[i]);
10     }
11     int temp=A[4];
12     for(i=4;i>=0;i--)
13     {
14         A[i]=A[i-1];
15     }
16     A[0]=temp;
17     for(i=0;i<5;i++)
18     {
19         printf("%d",A[i]);
20     }
21 }

```

revrse an aaray.cpp

```
1 //reverse an array|
2 #include<stdio.h>
3 int main()
4 {
5     int A[5],AR[5],ARR[5],i;
6     printf("enter the elements in 1 array");
7     for(i=0;i<5;i++)
8     {
9         scanf("%d",&A[i]);
10    }
11    for(i=4;i>=0;i--)
12    {
13        printf("%d ",A[i]);
14    }
15 }
```

[*] queue1.cpp




```
1 //program for queue
2 #include<stdio.h>
3 #include<conio.h>
4 #include<stdlib.h>
5 int q[5],front=-1,rare=-1;
6 void enqueue()
7 {
8     if(front==-1)
9     {
10         front++;rare++;
11     }
12     else
13     {
14         printf("enter value ");
15         scanf("%d",&q[rare]);
16         rare++;
17     }
18     if(rare>4)
19     {printf("queue is full");
20     return;
21     }
22 }
23 void dequeue()
24 {
25     if(rare==-1)
26     printf("queue is empty");
27     else
28     printf("element removed is%d/n",q[front]);
29 }
```



```

27     else
28         printf("element removed is%d/n",q[front]);
29         front++;
30     }
31 }
32
33 void view()
34 {
35     int i;
36     if(rare==--1)
37         printf("queue is empty ");
38     else
39     {
40     {
41         for(i=front;i<rare;i++)
42             printf("%d ",q[i]);
43     }
44 }
45 }
46 main()
47 {
48     int no;
49     while(1)
50     {
51         printf("enter 1 to insert\nenter 2 to delete\nenter 3 to view \n");
52         scanf("%d",&no);
53         switch(no)
54         {
55             case 1: enqueue();

```

 Compile Log
  Debug
  Find Results

```

38     else
39     {
40     {
41     for(i=front;i<rare;i++)
42     printf("%d ",q[i]);
43     }
44     }
45     }
46     main()
47     {
48     int no;
49     while(1)
50     {
51     printf("enter 1 to insert\nenter 2 to delete\nenter 3 to view \n");
52     scanf("%d",&no);
53     switch(no)
54     {
55     case 1:enqueue();
56     break;
57     case 2: dequeue();
58     break;
59     case 3:view();
60     }
61     }
62     }
63
64
65 }

```

```

1 //DOUBLE LINKED LIIST
2 #include<stdio.h>
3 #include<stdlib.h>
4 #include<conio.h>
5 struct node
6 {
7     int data;
8     struct node*next,*prev;
9 };
10 struct node *head=NULL;
11 create()
12 {char opt;struct node *ptr,*temp;
13     do
14     {
15         ptr=(struct node*)malloc(sizeof(struct node));
16         if(head==NULL)
17         {
18             ptr->next=NULL;
19             ptr->prev=NULL;
20             printf("enter the data");
21             scanf("%d",&ptr->data);
22             printf("press y to continue");
23         }
24         else
25         {
26             temp=(struct node*)malloc(sizeof(struct node));
27             printf("enter the data");
28             scanf("%d",&temp->data);
29             temp->next=NULL;

```

 Compile Log
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double linkes.cpp

```
24 |
25 |     else
26 |     {
27 |         temp=(struct node*)malloc(sizeof(struct node));
28 |         printf("enter the data");
29 |         scanf("%d",&temp->data);
30 |         temp->next=NULL;
31 |         ptr->next=temp;
32 |         temp->prev=ptr;
33 |         ptr=temp;
34 |         printf("press y to cin");
35 |         opt=getchar();
36 |     }
37 |     while(opt=='y');
38 | }
39 | void insert()
40 | {
41 |     struct node *temp,*ptr;
42 |     temp->next=ptr->next;
43 |     ptr->next->prev=temp;
44 |     ptr->next=temp;
45 |     temp->prev=ptr;
46 | }
47 | int main()
48 | {
49 |     create();
50 |     insert();
51 | }
```



[*] stack.cpp

```
1 //STACK
2 #include<stdio.h>
3 #include<conio.h>
4 #include<stdlib.h>
5 int top=-1,stack[5],i;
6 void push()
7 { if(top<4)
8 {
9     top++;
10    printf("enter value ");
11    scanf("%d",&stack[top]) ;
12 }
13 }
14 void pop()
15 {
16     printf("element deleted is%d",stack[top]);
17     top--;
18 }
19 void view()
20 {
21     if(top== -1)
22     printf("stack is empty");
23     else
24     {
25         printf("stack is ");
26         for(i=0;i<=top;i++)
27             printf("%d ",stack[i]);
28     }
```

Compile Log Debug Find Results

```

[*] stack.cpp
23     printf("stack is empty");
24     else
25
26 {
27     printf("stack is ");
28     for(i=0;i<=top;i++)
29         printf("%d",stack[i]);
30 }
31
32 }
33 main()
34 {
35     int n;
36     while(1)
37     {
38         printf("\nEnter 1 to push\nEnter 2 to pop\nEnter 3 to view\n");
39         scanf("%d",&n);
40         switch(n)
41         {
42             case 1:push();
43             break;
44             case 2:pop();
45             break;
46             case 3:view();
47         }
48     }
49 }
50

```