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1: #include<stdio.h>
2: #include<conio.h>
3: #include<stdlib.h>
4: int main()
5: {
6:     int ch,size,i,loc,num,j,l;
7:     int flag=1,num1,k;
8:     int *ptr,*ptr1;
9:     while(1)
10:    {
11:        printf(" Implement Array Operations ");
12:        printf("\n 1.Create");
13:        printf("\n 2.Display");
14:        printf("\n 3.Insert");
15:        printf("\n 4.Delete");
16:        printf("\n 5.Exit");
17:        printf("\n Enter your choice: ");
18:        scanf("%d",&ch);
19:        switch(ch)
20:        {
21:            case 1:
22:                printf("\n Enter the size: ");
23:                scanf("%d",&size);
24:                ptr=(int*)malloc(size*sizeof(int));
25:                printf("\n Enter the elements: ");
26:                for(i=0;i<size;i++)
27:                    scanf("%d",ptr+i);
28:                break;
29:            case 2:
30:                printf("\n The displayed array: ");
31:                for(i=0;i<size;i++)
32:                    printf("%5d",*(ptr+i));
33:                getch();
34:                break;
35:            case 3:
36:                printf("\n Enter location you want to insert: ");
37:                scanf("%d",&loc);
38:                if(loc>size)
39:                {
40:                    printf("\n Error!Location out of range try again");
41:                    getch();
42:                }
43:                else
44:                {
45:                    printf("\n Enter the new item: ");
46:                    scanf("%d",&num);
47:                    ptr1=(int *)malloc(sizeof(int)*size);
48:                    for(i=0;i<size;i++)
49:                        *(ptr1+i)=*(ptr+i);
50:                    free(ptr);
51:                    size++;
52:                    ptr=(int *)malloc(sizeof(int)*size);
53:                    for(i=0,j=0;i<size;i++,j++)
54:                    {
55:                        if(i==loc)
56:                            ptr[j]=num;
57:                        else if(i>loc)
58:                            ptr[j]=ptr1[i-1];
59:                        else
60:                            ptr[j]=ptr1[i];
61:                    }

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62:         free(ptr1);
63:     }
64:     break;
65: case 4:
66:     printf("\n Enter the number you want to delete: ");
67:     scanf("%d",&num1);
68:     for(l=0;l<size;l++)
69:     {
70:         if(num1==ptr[l])
71:         {
72:             flag=0;
73:             break;
74:         }
75:     }
76:     if(flag==1)
77:     {
78:         printf("\nThe No. Not found!");
79:         getch();
80:     }
81:     else
82:     {
83:         ptr1=(int*) malloc(sizeof(int)*size);
84:         for(k=0;k<size;k++)
85:             *(ptr1+k)=*(ptr+k);
86:         size--;
87:         free(ptr);
88:         ptr=(int*) malloc(sizeof(int)*size);
89:         for(i=0,j=0;i<size+1;i++,j++)
90:         {
91:             if(i>1)
92:                 ptr[j-1]=ptr1[i];
93:             else
94:             {
95:                 if(ptr1[j]!=num1)
96:                     ptr[j]=ptr1[i];
97:             }
98:         }
99:         free(ptr1);
100:     }
101:     break;
102: case 5:
103:     exit(0);
104: }
105: }
106: }

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