

```
1: // Buoi 3: Cac bai toan chen va xoa
2:
3: #include<stdio.h>
4: #include<conio.h>
5: #include <stdlib.h>
6: //Nhap mang 1 chieu:
7: void NhapMang(int *a, int n)
8: {int i;
9:     for (i=0;i<n;i++)
10:    {
11:        printf("\n Nhap phan tu %d: ",i);
12:        scanf("%d",&a[i]); //(a+i)=&a[i]
13:    }
14: }
15: //Xuat mang 1 chieu:
16: void XuatMang(int *a, int n)
17: {int i;
18:     for (i=0;i<n;i++)
19:         printf("\t%d",*(a+i)); /*(a+i)=a[i]
20: }
21: // Kiem tra so nt

22: int kt_snt(int n)
23: {
24:     int dem=0,i;
25:     for(i=1;i<=n;i++)
26:         if(n%i==0)
27:             dem++;
28:     if (dem==2) return 1;
29:     return 0;
30: }
31: // Kiem tra so chinh phuong
32: int kt_scp(int n)
33: {
34:     int i;
35:     for(i=1;i<=n;i++)
36:         if(i*i==n)
37:             return 1;
38:     return 0;
39: }
```

```
40: // Ham tim so nt min
41: int min_nt(int *_a, int _n)
42: {int i, min=-1;
43:     for(i=0; i<_n; i++)
44:         if(kt_snt(*(_a+i))==1)
45:             {
46:                 min=*_a+i;
47:                 break;
48:             }
49:     for(i=0; i<_n; i++)
50:         if(kt_snt(*(_a+i))==1 && min>*_a+i)
51:             {
52:                 min=*_a+i;
53:             }
54:     return min;
55: }
56: // Hàm Chen so X vao vi tri bat ky trong mang
57: void chen_X(int *_a, int *_n, int vt, int X)
58: {
59:     realloc(_a, ((*n)+1)*sizeof(int*));
60:     int i;
61:     for(i=*n; i>vt; i--)
62:         *(_a+i)=*(_a+i-1);
63:         *(_a+vt)= X;
64:         (*n)++;
65: }
66: // Ham chen X vao sau cac so nguyen to
67: void ChenX_sau_nto(int *_a, int *_n, int X)
68: {
69:     int i;
70:     for(i=0; i<(*n); i++)
71:     {
72:         if(kt_snt(*(_a+i))==1)
73:         {
74:             chen_X(_a, _n, i+1, X);
75:             i++;
76:         }
77:     }
78: }
79: // Chuong trinh chinh
```

```
80:
81: int main()
82: {
83:     int *a,n,i,X,vt;
84:     float TBC;
85:     do // nhap so phan tu >=1 Nho hon 50
86:     {
87:         printf("\n Nhap vao so phan tu mang: ");
88:         scanf("%d",&n);
89:     }
90:     while (n<1 || n>50);
91:
92:     a=(int *)malloc(n*sizeof(int)); // Cap
    phat bo nho dong
93:     NhapMang(a,n);
94:     printf("\n Mang vua nhap la:"); // Kiem
    tra xem nhap da
95:     XuatMang(a,n); // dung hay chua
96:     // Chen min nto vao vi tri k
97:     X=min_nt(a,n);
98:     if (X==-1)
99:         printf("\n Khong co so nto trong mang");
100:    else
101:    {
102:
103:        // Chen nt min vao sau vi tri k tu ban phim
104:        printf("\n Gia tri Min Nto la: %d",X);
105:        printf("\n Nhap vi tri can chen: ");
106:        scanf("%d",&vt);
107:
108:        chen_X(a,&n,vt,X);
109:        printf("\n Mang sau khi chen la:");
110:        XuatMang(a,n);
111:
112:        ChenX_sau_nto(a,&n,1000); // Chen gia tri
    1000 sau cac so nto
113:        printf("\n Mang sau khi chen la:");
114:        XuatMang(a,n);
115:    }
116:
```

```
117:     free(a); // giai phong bo nho
118: return 1;
119: }
120:
```