```
#include <stdio.h>
 1
     #include <conio.h>
 2
     // bài 2 vo ghi
 4 —
     main (){
 5
          int n,i;
         FILE *f;
 6
 7
         f= fopen("ltnc.txt", "r");
 8
         fscanf (f, "%d", &n);
9
          int a[100], tong = 0;
10
         for (int i =1; i<=n; i++) fscanf (f, "%d", &a[i]);
11
         fclose (f);
         printf (" so phan tu là %d ",n);
12
         for ( i =1; i<=n; i++) printf (" \n%d", a[i]);</pre>
13
14
          for (int i =1; i<=n; i++) tong += a[i];
         f = fopen ("output.txt", "w");
15
         fprintf (f, " %d", tong);
16
         fclose(f);
17
          int max = a[1];
18
          for (int i = 1; i < = n; i + +) if (a[i] > max) max = a[i];
19
         f = fopen ("output1.txt", "w");
20
         fprintf (f, " %d", max);
21
22
         fclose (f);}
```

```
#include <stdio.h>
 2
     #include <conio.h>
 3
     // bài 2 vo ghi
     // so thuc
 5 - main (){
 6
         int n,i;
         FILE *f:
 7
         f= fopen("ltnc.txt", "r");
 8
         fscanf (f, "%d", &n);
9
         float a[100], tong = 0;
10
11
         for (int i =1; i<=n; i++) fscanf (f, "%f", &a[i]);
         fclose (f);
12
13
         printf (" so phan tu là %d ",n);
         for ( i =1; i<=n; i++) printf (" \n%.3f", a[i]);
14
15
         for (int i =1; i<=n; i++) tong += a[i];
         f = fopen ("output.txt", "w");
16
         fprintf (f, " %.3f", tong);
17
         fclose(f);
18
19
         float max = a[1];
20
         for (int i =1; i<=n; i++) if (a[i] > max) max = a[i];
         f = fopen ("output1.txt", "w");
21
         fprintf (f, " %.3f", max);
22
         fclose (f);
23
```

```
1
     #include <stdio.h>
 2
     // bài 4 vo ghi
 3
     // ma tran
   - main (){
 5
         int m,n,i,j;
6
         FILE *f;
         f= fopen("matran.txt", "r");
7
         fscanf (f, "%d%d", &m,&n);
8
9
         int a[50][50];
10 -
         for ( i =1; i<=m; i++) {
             for ( j =1; j<=n; j++) {
11 -
                 fscanf (f, "%d", &a[i][j]);
12
13
14
15
         fclose (f);
         printf (" cap ma tran là %dx%d \n",m,n);
16
17
18 🗔
         for ( i =1; i<=m; i++) {
19 -
             for ( j =1; j<=n; j++) { printf ("%d ", a[i][j]);
             } printf ("\n");
20
21
22
         int t = 1;
23 🗔
         for ( i =1; i<=m; i++) {
24 -
             for ( j =1; j<=n; j++) {
                 if ( i > j && m == n && a[i][j] != 0) t = 0;
25
26
27
         f = fopen ("output.txt", "w");
28
         fprintf (f, "%d",t);
29
         fclose(f);
30
31
```

```
#include <stdio.h>
     #include <conio.h>
       main()
 5
          FILE *fp;
 6
          char ch;
          printf("Nhap cac ki tu : ");
          fp=fopen("D:\\textfile.txt","wt");
 8
 9
          while ((ch=getchar())!=EOF)
10
              putc(ch,fp);
11
          fclose(fp);
12
          getch();
13
14
15
```

```
1 #include <stdio.h>
    #include <conio.h>
     #include <math.h>
     void nhap(char *tenFile, int *a, int n);
 5
     void xuat(char *tenFile, int *a, int n);
 6
 7
     main()
 8 🗏 {
         int n; int a[100];
         int i;
10
         FILE *f;
         nhap ( "input.txt",a,n);
11
         // in ra man hinh de kiem tra
12
         for (int i = 1; i <= n; i++) printf("%d ", a[i]);</pre>
13
14
         printf("\n");
15
         getch();
16
         // xuat ra file
17
         xuat("output.txt", a, n);
18 L }
```

```
void nhap(char *tenFile, int *a, int n){
20
         // mo file de doc
21
         FILE* f = fopen("input.txt", "r");
22
23
         if (f == NULL) printf("Khong mo duoc tap tin!");
24
25
         fscanf(f, "%d", &n);
26
27
         for (int i = 1; i \le n; i++) fscanf(f, "%d", &a[i]);
28
         //dong file
29
         fclose(f);
30
31
32 —
     void xuat(char *tenFile, int *a, int n){
33
         //mo file de ghi
         FILE* f = fopen("output.txt", "wt"); // wt = write (ghi) + text (dang van ban)
34
         //ghi du lieu ra file
35
         for (int i = 1; i <=n; i++)
36
             fprintf(f, "%d ", a[i]);
37
         // dong file
38
         fclose(f);
39
40
```

```
1
     #include <stdio.h>
 2
     #include <comio.h>
 3
     #include <stdlib.h>
 4
      #include<string.h>
      // bai 2 trang 129 laptrinhnangcao
 5
 6  struct hanghoa {
 7
          char tenhang[30];
          int soluong;
 8
          char loaihang[30];
 9
10
    - };
11
12
     typedef hanghoa HH;
13  void nhap(HH a[], int n){
14
        for(int i = 1; i <= n; ++i){
15
          printf("\nNhap HH thu %d:", i);
          printf("\nNhap ten hang : "); fflush(stdin); gets(a[i].tenhang);
16
          printf("Nhap loai hang: "); gets(a[i].loaihang);
17
          printf("Nhap so luong hang: "); scanf("%d", &a[i].soluong);}
18
19
20 void xuat(char *tenFile, HH a[], int n){
21
          FILE* f = fopen("hanghoa.txt", "wt");
22 🖃
          for(int i = 1; i \leftarrow n; i++){
              struct hanghoa HH = a[i];
23
              fprintf(f,"\nNhap HH thu %d:", i);
24
              fprintf(f,"\nten hang : %s", a[i].tenhang);fflush(stdin);
25
              fprintf(f,"\nloai hang : %s", a[i].loaihang);
26
              fprintf(f,"\nso luong hang : %d", a[i].soluong);
27
28
          }fclose (f);
29
30
```

```
30
     void xuatN( HH a[], int n){
31 -
32 -
         for(int i = 1; i <= n; i++){}
33
              printf("\nhang hoa thu %d:", i);
34
              printf("\nten hang : %s", a[i].tenhang);fflush(stdin);
              printf("\nloai hang : %s", a[i].loaihang);
35
              printf("\nso luong hang : %d", a[i].soluong);;
36
37
38
39 -
     void timhanghoa(char *ten,HH a[], int n){
         int found = 0;
40
          printf (" ten hang hoa can tim la ");
41
         fflush(stdin); gets(ten);
42
43
         for(int i=1; i<=n; ++i){
44
              if(strcmp(a[i].tenhang,ten)==0) {
45
                 xuatN(a,n);
                 found = 1;
46
47
48
49
              if ( found == 0) printf ( " khong tim thay hang hoa");}
50
     int main (){
51 -
52
         int n; char ten[30];
53 -
          do{
54
              printf("\nNhap n : "); scanf("%d", &n);
          }while(n <= 0);</pre>
55
56
         HH a[n];
57
         nhap(a, n);
58
         xuatN( a, n);
59
         xuat("hanghoa.txt",a, n);
         fflush(stdin); gets(ten);
60
61
         timhanghoa("n",a, n);
62
63
```

```
#include <stdio.h>
 2
     #include <stdlib.h>
     // bài 3 sbt tr 129
 3
     // ma tran
     void nhap( float *a ,int n, int m,int N){
6
         for(int i=0; i<n; i++){
7 🗀
             for( int j=0; j<m; j++){
                 printf("a[%d][%d]= ",i,j);
8
                 scanf("%f ",a + i*N + j);
 9
10
11
12
     void xuat(float *a ,int n, int m, int N){
14
         printf ("%d x %d\n",n,m);
15
         for(int i=1; i<=n; i++){
16 -
             for(int j=1; j<=m; j++){
17
                 printf("%f ", *(a + i*N + j));
18
19
             printf("\n");
20
21
     void nhapfile(char *tenfile,float *a ,int n, int m, int N){
22 -
         FILE*f= fopen("matran.txt", "r");
23
         fscanf (f, "%d %d", &n,&m);
24
         for ( int i =1; i<=n; i++) {
25 -
26 -
             for ( int j =1; j<=m; j++) {
27
                 fscanf (f, "%f ", *(a + i*N + j));
28
29
30
         fclose (f);}
31 🖃
     void xuatfile(char *tenfile,float *a ,int n, int m, int N){
32
         FILE*f= fopen("matran1.txt", "wt");
33
         fprintf (f, "%d %d", n, m);
34 -
         for ( int i =1; i<=n; i++) {
35 -
             for ( int j =1; j<=m; j++) {
                 fprintf (f, \%f \%, *(a + i*N + j));
36
```

```
37
38
39
         fclose (f);}
40 void ghinhiphan (char *tenfile, float *a , int n, int m){
         FILE *fp;
41
42
         if ((fp = fopen("matran2.txt", "wb"))== NULL) printf(" khong mo dc file \n"); exit(1);
43
         for ( int i =1; i<=n; i++) {
44 -
             for ( int j =1; j<=m; j++) {
45
                 fwrite (&a, sizeof(float),1,fp);
46
47
         }fclose (fp);
48
  void docnhiphan (char *tenfile,float *a ,int n, int m){
50
         FILE *fp;
         if ((fp = fopen("matran3.txt", "wb"))== NULL) printf(" khong mo dc file \n"); exit(1);
51
52 -
         for ( int i =1; i<=n; i++) {
53 —
             for ( int j =1; j<=m; j++) {
54
                  fread (&a, sizeof(float),1,fp);
55
56
         }fclose (fp);
57
58 ☐ int main (){
59
         FILE *f; FILE *fp;
         int m,n,i,j;
60
         scanf ("%d%d", &n,&m);
61
62
         float a[50][50];
         //nhap((float*)a , n ,m, 50);
63
         //xuat((float*)a ,n, m,50);
64
65
         nhapfile("matran.txt",(float*)a ,n, m,50);
         //xuatfile("matran1.txt",(float*)a ,n, m,50);
66
67
         xuat((float*)a ,n, m,50);
         xuatfile("matran1.txt",(float*)a ,n, m,50);
68
         xuat((float*)a ,n, m,50);
69
70
         ghinhiphan ("matran2.txt",(float*)a ,n, m);
         docnhiphan ("matran3.txt",(float*)a ,n, m);
71
72
73
```