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Bài 1/

```c
#include<stdio.h>
void main(int argc,char** argv){

if(argc>2)printf("co qua nhieu doi so\n");
else{
        if(atoi(argv[1])<=0)
                printf("doi so khong hop le\n");
        else if(atoi(argv[1])>0){
                int i,sum=0;
                for(i=1;i<atoi(argv[1])+1;i++)
                        sum+=i;
                printf("tong = %d\n",sum);}


        }
}
```

```
duong@ubuntu:~$ cd Desktop
duong@ubuntu:~/Desktop$ cd baitap
duong@ubuntu:~/Desktop/baitap$ cd lab2
duong@ubuntu:~/Desktop/baitap/lab2$ cd bai1
duong@ubuntu:~/Desktop/baitap/lab2/bai1$ gcc -c bai1.c -o bai1.o
duong@ubuntu:~/Desktop/baitap/lab2/bai1$ gcc -o bai1.out bai1.o
duong@ubuntu:~/Desktop/baitap/lab2/bai1$ ./bai1.out 8
tong = 36
duong@ubuntu:~/Desktop/baitap/lab2/bai1$ ./bai1.out abc
doi so khong hop le
duong@ubuntu:~/Desktop/baitap/lab2/bai1$ ./bai1.out 8 19 ab
co qua nhieu doi so
duong@ubuntu:~/Desktop/baitap/lab2/bai1$
```

Bài2/

```c
#include<stdio.h>
void main(int argc,char**argv){
int i,j,n=0;
int a[argc];
for(i=1;i<argc;i++){     //luu cac so vao 1 mang a
        if(atoi(argv[i])!=0)
                a[n++]=atoi(argv[i]);
        else if(strcmp(argv[i],"0")==0)
                a[n++]=atoi(argv[i]);
}
for(i=0;i<n-1;i++){                //sort
        for(j=i+1;j<n;j++){
                if(a[i]>a[j]){
                        int temp=a[i];
                        a[i]=a[j];
                        a[j]=temp;}
        }
}
for(i=0;i<n;i++)
        printf("%d ",a[i]);
}
```

```
duong@ubuntu: ~/Desktop/baitap/lab2/bai2
duong@ubuntu:~/Desktop/baitap/lab2/bai2$ gcc -c  bai2.c -o bai2.o
duong@ubuntu:~/Desktop/baitap/lab2/bai2$ gcc -o bai2.out bai2.o
duong@ubuntu:~/Desktop/baitap/lab2/bai2$ ./ bai2.out 8 3 1 ab -12
bash: ./: Is a directory
duong@ubuntu:~/Desktop/baitap/lab2/bai2$ ./bai2.out 8 3 1 ab -12
-12 1 3 8 duong@ubuntu:~/Desktop/baitap/lab2/bai2$
```

Bài 3/

```c
#include<stdio.h>
void add(int a,int b){
        printf("tong = %d\n", a+b);
}
```

```c
*add.c ×    main.c ×    *sub.c ×

#include<stdio.h>
void sub(int a,int b){
        printf("hieu = %d\n", a-b);
}
```

```c
*add.c ×    main.c ×    *sub.c ×

#include<stdio.h>
void main(int argc,char** argv){
if(argc==4){
        if(strcmp(argv[3],"+")==0)
                add(atoi(argv[1]),atoi(argv[2]));
        else if(strcmp(argv[3],"-")==0)
                sub(atoi(argv[1]),atoi(argv[2]));
        else
                printf("thong tin khong hop le");
}
else printf("nhap thong tin khong hop le");
}
```

Thư viện tĩnh

```
duong@ubuntu: ~/Desktop/baitap/lab2/bai3
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -c add.c sub.c
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ar cr libh.a add.o sub.o
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -c main.c
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -o main.out main.o libh.a
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 +
tong = 3
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 3 4 -
hieu = -1
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 *
nhap thong tin khong hop le
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 %
thong tin khong hop le
duong@ubuntu:~/Desktop/baitap/lab2/bai3$
```

Thư viện động


```
duong@ubuntu: ~/Desktop/baitap/lab2/bai3
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -c -fPIC add.c sub.c
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -shared -fPIC -o libd.a add.o sub.o
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ sudo cp libd.a /lib
[sudo] password for duong:
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -c main.c
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ gcc -o main.out main.o libd.a
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 +
tong = 3
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 3 4 -
hieu = -1
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 *
nhap thong tin khong hop le
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ ./main.out 1 2 %
thong tin khong hop le
duong@ubuntu:~/Desktop/baitap/lab2/bai3$ S
```