Screenshot 1 — q5.c

```c
#include<stdio.h>

struct info{
    int Process_ID;
    int CPU_ID;
    char State[20];
    int Parent_id;
    int Total_wait_time;
}a[10];

void main(){

    int i=0;
    for(i=0;i<10;i++){
    printf("enter Process_ID");
    scanf("%d",a[i].Process_ID);
    printf("enter cpu ID");
    scanf("%d",a[i].CPU_ID);
    printf("enter State");
    gets(a[i].State);
    printf("enter Parent_id");
    scanf("%d",a[i].Parent_id);
    printf("enter Total_wait_time");
    scanf("%d",a[i].Total_wait_time);

    }
}
```

Terminal output:

```
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q5.c
^C
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q5.c
^C
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q5 q5.c
q5.c:3:13: error: expected identifier or '(' before ')' token
 struct info(){
             ^
q5.c:11:1: error: expected '=', ',', ';', 'asm' or '__attribute__' before 'void'
 void main(){
 ^~~~
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q5.c
^C
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q5 q5.c
q5.c: In function 'main':
q5.c:16:10: warning: format '%d' expects argument of type 'int *', but argument 2 h
as type 'int' [-Wformat=]
   scanf("%d",a[i].Process_ID);
          ^   ~~~~~~~~~~~~~~~~
q5.c:18:10: warning: format '%d' expects argument of type 'int *', but argument 2 h
as type 'int' [-Wformat=]
   scanf("%d",a[i].CPU_ID);
          ^   ~~~~~~~~~~~~
q5.c:20:2: warning: implicit declaration of function 'gets'; did you mean 'fgets'?
[-Wimplicit-function-declaration]
   gets(a[i].State);
   ^~~~
   fgets
q5.c:22:10: warning: format '%d' expects argument of type 'int *', but argument 2 h
as type 'int' [-Wformat=]
   scanf("%d",a[i].Parent_id);
          ^   ~~~~~~~~~~~~~~~
q5.c:24:10: warning: format '%d' expects argument of type 'int *', but argument 2 h
as type 'int' [-Wformat=]
   scanf("%d",a[i].Total_wait_time);
          ^   ~~~~~~~~~~~~~~~~~~~~~
/tmp/ccPMjf0L.o: In function 'main':
q5.c:(.text+0xe1): warning: the 'gets' function is dangerous and should not be used
nla204@nla204-OptiPlex-5050:~/lab3$ ./q5
enter Process_ID4
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q5.c
```

Screenshot 2 — q4.c

```c
#include <stdio.h>
typedef union complex {
    float real;
    float imag;
} complex;
complex add(complex n1, complex n2);

complex sub(complex n1, complex n2);

int main() {
    int a;
    complex n1, n2, result;
    printf("For 1st complex number \n");
    printf("Enter the real and imaginary parts: ");
    scanf("%f %f", &n1.real, &n1.imag);
    printf("\nFor 2nd complex number \n");
    printf("Enter the real and imaginary parts: ");
    scanf("%f %f", &n2.real, &n2.imag);
    printf("%s","1 for add 2 for sub");
    scanf("%d",&a);
    if(a==1){

    result = add(n1, n2);

    printf("Sum = %.1f + %.1fi", result.real, result.imag);

}else{

    result = sub(n1, n2);

    printf("Sub = %.1f + %.1fi", result.real, result.imag);

}

    return 0;
}
complex add(complex n1, complex n2) {
    complex temp;
    temp.real = n1.real + n2.real;
    temp.imag = n1.imag + n2.imag;
    return (temp);
}
complex sub(complex n1, complex n2) {
    complex temp;
    temp.real = n1.real - n2.real;
```

Terminal output:

```
s type 'int' [-Wformat=]
 scanf("%d",b.img );
        ^   ~~~~~
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real1
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
For 1st complex number
Enter the real and imaginary parts: 2
2

For 2nd complex number
Enter the real and imaginary parts: 4
5
1 for add 2 for sub

Sub = -2.0 + -3.0inla204@nla204-OptiPlex-5050:~/lab3$ 5
5: command not found
nla204@nla204-OptiPlex-5050:~/lab3$
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
For 1st complex number
Enter the real and imaginary parts: 3
6

For 2nd complex number
Enter the real and imaginary parts: 1
7
1 for add 2 for sub2
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q4.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q4 q4.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q4
For 1st complex number
Enter the real and imaginary parts: 4
56

For 2nd complex number
Enter the real and imaginary parts: 3
76
1 for add 2 for sub1
Sum = 132.0 + 132.0inla204@nla204-OptiPlex-5050:~/lab3$ gedit q4.c
```

nla204@nla204-OptiPlex-5050: ~/lab3

File Edit View Search Terminal Help

```
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
^C
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
q3.c: In function 'main':
q3.c:17:9: warning: format '%d' expects argument of type 'int *', but argument 2 has type 'int' [-Wformat=]
 scanf("%d",a.real);
         ~^  ------
q3.c:19:9: warning: format '%d' expects argument of type 'int *', but argument 2 has type 'int' [-Wformat=]
 scanf("%d",a.img);
         ~^  -----
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 has type 'int' [-Wformat=]
 scanf("%d",b.real );
         ~^  ------
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 has type 'int' [-Wformat=]
 scanf("%d",b.img );
         ~^  -----
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real1
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
For 1st complex number
Enter the real and imaginary parts: 2
2

For 2nd complex number
Enter the real and imaginary parts: 4
5
1 for add 2 for sub
4
Sub = -2.0 + -3.0inla204@nla204-OptiPlex-5050:~/lab3$ 5
5: command not found
nla204@nla204-OptiPlex-5050:~/lab3$
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
For 1st complex number
Enter the real and imaginary parts: 3
6

For 2nd complex number
Enter the real and imaginary parts: 1
7
1 for add 2 for sub2
nla204@nla204-OptiPlex-5050:~/lab3$ []
```

First screen — Terminal (nla204@nla204-OptiPlex-5050: ~/lab3):

```
                scanf("%d",a.img);
                     -^
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",b.real );
                     -^ -----
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",b.img );
                     -^ -----
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real2
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ 4
4: command not found
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q1.c
^H^H^C
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
bash: ./q1: No such file or directory
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q1 q1.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
910nla204@nla204-OptiPlex-5050:~/lab3$ ./q2
enter the comand#
Process completednla204@nla204-OptiPlex-5050:~/lab3$ gedit q2.c
^C
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
q3.c: In function 'main':
q3.c:17:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",a.real);
                     -^ -----
q3.c:19:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",a.img);
                     -^ -----
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",b.real );
                     -^ -----
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
                scanf("%d",b.img );
                     -^
```

First screen — Text Editor (q3.c):

```c
#include <stdio.h>
#include <stdlib.h>

struct complex
{
    int real, img;
};

void main()
{
int a1,a2,b1,b2;
struct complex a, b, c, d;

int i;

printf("%s","enter the real");
scanf("%d",a.real);
printf("%s","enter the img");
scanf("%d",a.img);

printf("%s","enter the real");
scanf("%d",b.real );
printf("%s","enter the real");
scanf("%d",b.img );

c.real=a.real+b.real;
c.img=a.img+b.img;

d.real=a.real-b.real;
d.img=a.img-b.img;

printf("%d", d.real);

}
```

Second screen — Terminal (nla204@nla204-OptiPlex-5050: ~/lab3):

```
nla204@nla204-OptiPlex-5050:~$ cd lab3
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
q3.c: In function 'main':
q3.c:17:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.real);
       -^ -----
q3.c:19:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.img);
       -^ -----
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.real );
       -^ -----
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.img );
       -^ -----
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real2
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ 4
4: command not found
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q1.c
^H^H^C
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
bash: ./q1: No such file or directory
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q1 q1.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
910nla204@nla204-OptiPlex-5050:~/lab3$ ./q2
enter the comand#
Process completednla204@nla204-OptiPlex-5050:~/lab3$ gedit q2.c
```

Second screen — Text Editor (q2.c):

```c
#include<stdio.h>

void main(){
char num;
printf("%s","enter the comand");
num=getchar();
    switch (num) {
        case '+':
            printf("Process in new state");
            break;
        case '-':
            printf("Process in ready state");
            break;
        case '*':
            printf("Process in running state");
            break;
        case '/':
            printf("Process moved to waiting state");
            break;
        case '$':
            printf("Process waiting for CPU");
            break;
        case '#':
            printf("Process completed");
            break;

    }
}
```

Terminal (first screenshot):

```
nla204@nla204-OptiPlex-5050:~$ cd lab3
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
q3.c: In function 'main':
q3.c:17:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.real);
       ~^  ~~~~~~
q3.c:19:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.img);
       ~^  ~~~~~
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.real );
       ~^  ~~~~~~
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.img );
       ~^  ~~~~~
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real2
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ 4
4: command not found
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q1.c
^H^H^C
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
bash: ./q1: No such file or directory
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q1 q1.c
nla204@nla204-OptiPlex-5050:~/lab3$ ./q1
910nla204@nla204-OptiPlex-5050:~/lab3$
```


Terminal (second screenshot):

```
nla204@nla204-OptiPlex-5050:~$ cd lab3
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gcc -o q3 q3.c
q3.c: In function 'main':
q3.c:17:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.real);
       ~^  ~~~~~~
q3.c:19:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",a.img);
       ~^  ~~~~~
q3.c:22:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.real );
       ~^  ~~~~~~
q3.c:24:9: warning: format '%d' expects argument of type 'int *', but argument 2 ha
s type 'int' [-Wformat=]
 scanf("%d",b.img );
       ~^  ~~~~~
nla204@nla204-OptiPlex-5050:~/lab3$ ./q3
enter the real2
Segmentation fault (core dumped)
nla204@nla204-OptiPlex-5050:~/lab3$ 4
4: command not found
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q3.c
nla204@nla204-OptiPlex-5050:~/lab3$ gedit q1.c
```

gedit (q1.c):

```c
#include<stdio.h>
int max(int a[],int l){
int y=a[0];
int i=0;
for(i=0;i<l;i++){
        if(a[i]>y){
            y=a[i];
}
}
return y;
}
int min(int a[],int l){
int y=a[0];
int i=0;
for(i=0;i<l;i++){
        if(a[i]<y){
            y=a[i];
}
}
}
void main(){
int a[10]={4,1,0,7,6,9,1,9,4,6};
int ui=(min(a,10));
int u=max(a,10);
printf("%d",u);
printf("%d",ui);
}
```