

Linux系统及Shell编程

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3.2

编译器gcc的使用

多文件编译

1. 创建一个文件夹

`mkdir`

2. 创建三个.c文件

• other1.c

```
void welcome() {  
    printf("Welcome to the world of Linux\n");  
}
```

• other2.c

```
int add(int x, int y) {  
    return x+y;  
}
```

```
int sub(int x, int y){  
    return x-y;  
}
```



```
• app.c
• #include <stdio.h>
• void main(){
•     int a=15,b=3,c;
•     printf("test in app\n");
•     welcome();
•     c = add(a, b);
•     printf("%d + %d = %d\n", a, b, c);
•     c = sub(a, b);
•     printf("%d - %d = %d\n", a, b, c);
• }
```


多文件编译

1. 编译

```
gcc other1.c other2.c app.c -o app
```

2. 运行

```
./app
```


增加头文件

• other1.h

```
#ifndef OTHER1_H
```

```
#define OTHER1_H
```

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

```
void welcome();
```

```
#endif
```

• other2.h

```
#ifndef OTHER2_H
```

```
#define OTHER2_H
```

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

```
int add(int, int);
```

```
int sub(int, int);
```

```
#endif
```


修改other1.c和other2.c

• other1.c

```
#include "other1.h"
```

```
void welcome(){
```

```
    ...
```

```
}
```

• other2.c

```
#include "other2.h"
```

```
int add(int, int) {
```

```
    ...
```

```
}
```

```
int sub(int, int){
```

```
    ...
```

```
}
```


修改app.c

```
#include "other1.h"
```

```
#include "other2.h"
```

```
void main(){
```

```
...
```

```
}
```


进行编译

```
gcc other1.c other2.c app.c -o app
```

```
./app
```