

1. 如果使用gcc编译汇编文件的话, 使用main符号作为入口(gcc -o a.out a.S)
2. 如果使用as和ld命令编译汇编的话, 使用_start符号作为入口(as test.S -o test.o; ld test.o -o a.out)

以上生成两个文件都是ELF格式的可执行文件, 只不过第一个会自动添加一些环境的初始化代码. 对于ELF文件可以通过objcopy命令来得到干净的二进制文件. 命令如下:

objcopy -S -O binary -j .text a.out a.bin (-S : 去掉调试符号, -O binary 生成原始二进制文件, -j .text 只保留.text段)

下面是测试的Makefile和test.S文件

```
#===== Makefile Start =====
```

```
.PHONY:all clean obj_clean
```

```
target := test
```

```
main_source := test.S
```

```
start_source := test.S
```

```
main_target := $(target).main
```

```
start_target := $(target).start
```

```
main_objs := $(patsubst %.S, %.o, $(main_source))
```

```
start_objs := $(patsubst %.S, %.o, $(start_source))
```

```
main: obj_clean $(main_target)
```

```
start: obj_clean $(start_target)
```

```
$(main_target) : CFLAGS += -DGNUGCC
```

```
$(main_target) : $(main_objs)
```

```
gcc -o $$@ $<
```

```
$(start_target) : $(start_objs)
```

```
ld -o $$@ $<
```

```
obj_clean:
```

```
rm -rf *.o
```

```
clean: obj_clean
```

```
rm -rf $(main_target) $(start_target)
```

```
%.o : %.S
```

```
gcc -c $(CFLAGS) $< -o $@
```

```
#===== Makefile End =====
```

```
#===== test.S Start =====
```

```
.text
```

```
.globl main
```

```
#ifndef GNUGCC
```

```
.globl _start
```

```
_start:
```

```
#endif
```

```
main:
```

```
.ascii "hello wolrd"
```

```
movl $2, %eax
```

```
int $0x80
```

```
#===== test.S Start =====
```