Assignment No : 10 Program

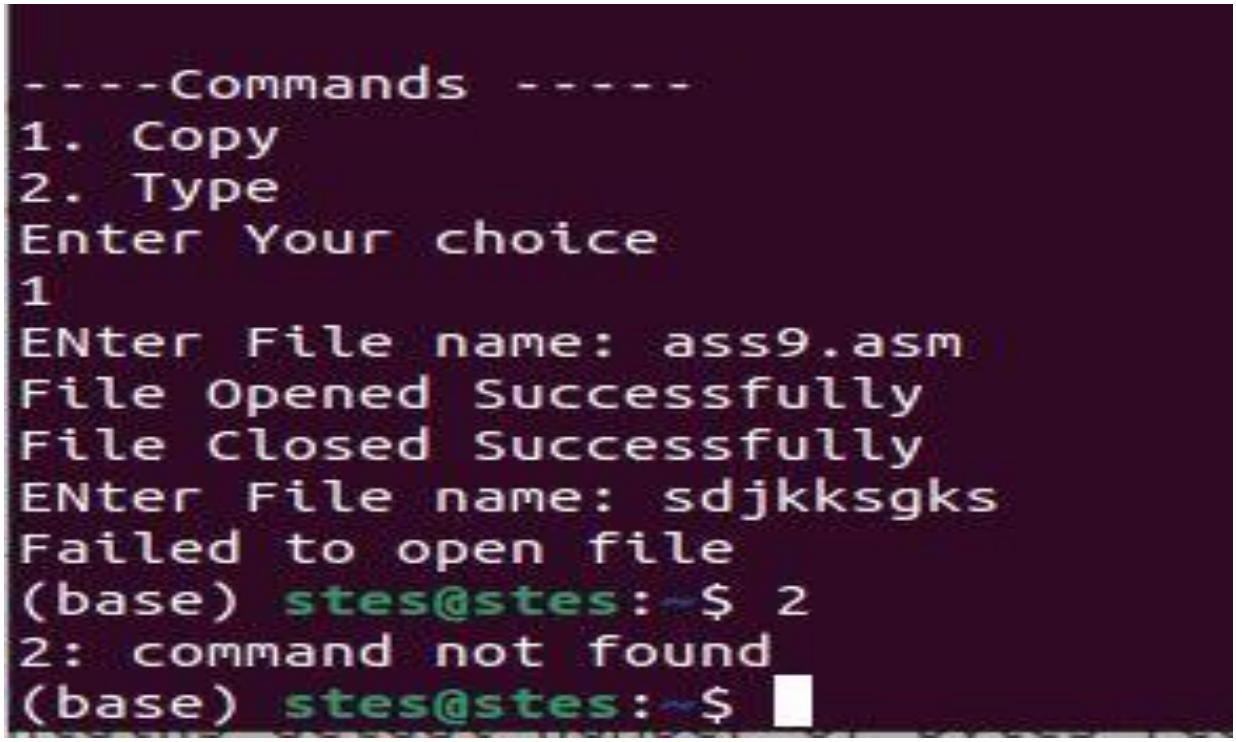
```
%macro scall 4
mov rax,%1
mov rdi,%2
mov rsi,%3
mov rdx,%4
syscall
%endmacro
Section .data
title: db 0x0A,"----Commands -----", 0x0A
db "1. Copy ",0x0A
db "2. Type ",0x0A
db "Enter Your choice", 0x0A
title_len: equ $-title
openmsg: db "File Opened Successfully",0x0A
openmsg_len: equ $-openmsg
closemsg: db "File Closed Successfully",0x0A
closemsg_len: equ $-closemsg
errormsg: db "Failed to open file", 0x0A
errormsg_len: equ $-errormsg
delmsg: db "Deleted File", 0x0A
delmsg_len: equ $-delmsg
typemsg: db "=-----File Contents ----=",0x0A
typemsg_len: equ $-typemsg
;f1name: db 'file1.txt', 0
;f2name: db 'file2.txt', 0
;f3name: db 'file3.txt',0
filenmsg: db "ENter File name: "
filen_len: equ $-filenmsg
Section .bss
buffer: resb 200
```

```
bufferlen:resb 8
cnt1:resb 8
fdis:resb 8
choice: resb 2
f1name: resb 20
f2name: resb 20
f3name: resb 20
Section .text
global main
main:
scall 1,1,title,title_len
scall 0,0,choice,2
;---------- CHOOSE OPTION -------------------------
;compare choice here
cmp byte[choice],'1' ;if choice is to display content
je COPY
cmp byte[choice],'2'
je TYPE
COPY:
scall 1,1,filenmsg,filen_len
scall 0,0, f1name, 20
dec rax
mov byte[f1name+rax],0
scall 2,f1name,2,777 ;Opening file
 mov qword[fdis],rax ;RAX contains file descriptor value
bt rax,63 ;63rd bit is +ve(0) if file is successfull opened else it is -ve (1)
jc next
 scall 1,1,openmsg,openmsg_len
jmp next1
next:
scall 1,1,errormsg,errormsg_len
```

```
jmp EXIT
next1:
scall 0,[fdis],buffer,200 ;reading contents of file in buffer
;rax contains actual number of bytes read
mov qword[bufferlen],rax
mov qword[cnt1],rax
;Closing file1
mov rax,3
mov rdi,f1name
syscall
scall 1,1,closemsg,closemsg_len
;------------------FILE 2 ------------------
scall 1,1,filenmsg,filen_len
scall 0,0, f2name, 20
dec rax
mov byte[f2name+rax],0
scall 2,f2name,2,777
mov qword[fdis],rax ;RAX contains file descriptor value
bt rax,63 ;63rd bit is +ve(0) if file is successfull opened else it is -ve (1)
jc next3
scall 1,1,openmsg,openmsg_len
jmp next21
next3:
scall 1,1,errormsg,errormsg_len
jmp EXIT
next21:
scall 1,qword[fdis],buffer,qword[bufferlen] ;writing to file2.txt
mov rax,3
mov rdi,f2name
syscall
scall 1,1,closemsg,closemsg_len
```

```
jmp main
TYPE:scall 1,1,filenmsg,filen_len
scall 0,0, f2name, 20
dec rax
mov byte[f2name+rax],0
scall 2,f2name,2,777 ;Opening file
mov qword[fdis],rax ;RAX contains file descriptor value
bt rax,63 ;63rd bit is +ve(0) if file is successfull opened else it is -ve (1)
jc tnext
scall 1,1,openmsg,openmsg_len
jmp tnext1
tnext:
scall 1,1,errormsg,errormsg_len
jmp EXIT
tnext1:
scall 0,[fdis],buffer,200 ;reading contents of file in buffer
mov qword[bufferlen],rax
scall 1,1, typemsg,typemsg_len
scall 1,1, buffer,qword[bufferlen]
;Closing file2
mov rax,3
mov rdi,f2name
syscall
scall 1,1,closemsg,closemsg_len
JMP main
EXIT:
mov rax,60
mov rdi,0
syscall
```

OUTPUT :


----Commands ------
1. Copy
2. Type
Enter Your choice
1
ENter File name: ass9.asm
File Opened Successfully
File Closed Successfully
ENter File name: sdjkksgks
Failed to open file
(base) stes@stes:~$ 2
2: command not found
(base) stes@stes:~$