

Shell Code

First, we need to create test.asm file by entering the assembly code.

```
root@kali:~/Downloads/OHTS/ShellCode/test# cat test.asm
section .data
    text db "Hello, World!",10

section .text
    global _start

_start:
    mov rax, 1
    mov rdi, 1
    mov rsi, text
    mov rdx, 14
    syscall

    mov rax, 60
    mov rdi, 0
    syscall
root@kali:~/Downloads/OHTS/ShellCode/test#
```

Then we need to create the object file using nasm

Code : `nasm -f elf64 -o test.o test.asm`

```
root@kali: ~/Downloads/OHTS/ShellCode/test
root@kali: ~/Downloads/OHTS/ShellCode/test 80x24
root@kali:~/Downloads/OHTS/ShellCode/test# cat test.asm
section .data
    text db "Hello, World!",10

section .text
    global _start

_start:
    mov rax, 1
    mov rdi, 1
    mov rsi, text
    mov rdx, 14
    syscall

    mov rax, 60
    mov rdi, 0
    syscall
root@kali:~/Downloads/OHTS/ShellCode/test# nasm -f elf64 -o test.o test.asm
root@kali:~/Downloads/OHTS/ShellCode/test# ls
test.asm  test.o
root@kali:~/Downloads/OHTS/ShellCode/test#
```

Then we have to create the executable

```
root@kali: ~/Downloads/OHTS/ShellCode/test
root@kali: ~/Downloads/OHTS/ShellCode/test 80x24
root@kali:~/Downloads/OHTS/ShellCode/test# ld test.o -o test
root@kali:~/Downloads/OHTS/ShellCode/test# ./test
Hello, World!
root@kali:~/Downloads/OHTS/ShellCode/test# ls
test  test.asm  test.o
root@kali:~/Downloads/OHTS/ShellCode/test#
```

Now we can get the Hex dump

```
root@kali: ~/Downloads/OHTS/ShellCode/test
root@kali: ~/Downloads/OHTS/ShellCode/test 80x24
root@kali:~/Downloads/OHTS/ShellCode/test# ld test.o -o test
root@kali:~/Downloads/OHTS/ShellCode/test# ./test
Hello, World!
root@kali:~/Downloads/OHTS/ShellCode/test# ls
test  test.asm  test.o
root@kali:~/Downloads/OHTS/ShellCode/test# objdump -M intel -d test

test:      file format elf64-x86-64

Disassembly of section .text:

0000000000401000 <start>:
401000:  b8 01 00 00 00      mov     eax,0x1
401005:  bf 01 00 00 00      mov     edi,0x1
40100a:  48 be 00 20 40 00 00 movabs  rsi,0x402000
401011:  00 00 00
401014:  ba 0e 00 00 00      mov     edx,0xe
401019:  0f 05              syscall
40101b:  b8 3c 00 00 00      mov     eax,0x3c
401020:  bf 00 00 00 00      mov     edi,0x0
401025:  0f 05              syscall
root@kali:~/Downloads/OHTS/ShellCode/test#
```

“xb8 x01 x00 x00 x00

xbf x01 x00 x00 x00

x48 xbe x00 x20 x40 x00 x00

x00 x00 x00

xba x0e x00 x00 x00

x0f x05

xb8 x3c x00 x00 x00

xbf x00 x00 x00 x00

x0f x05 ” is the hex dump of the hello world programme