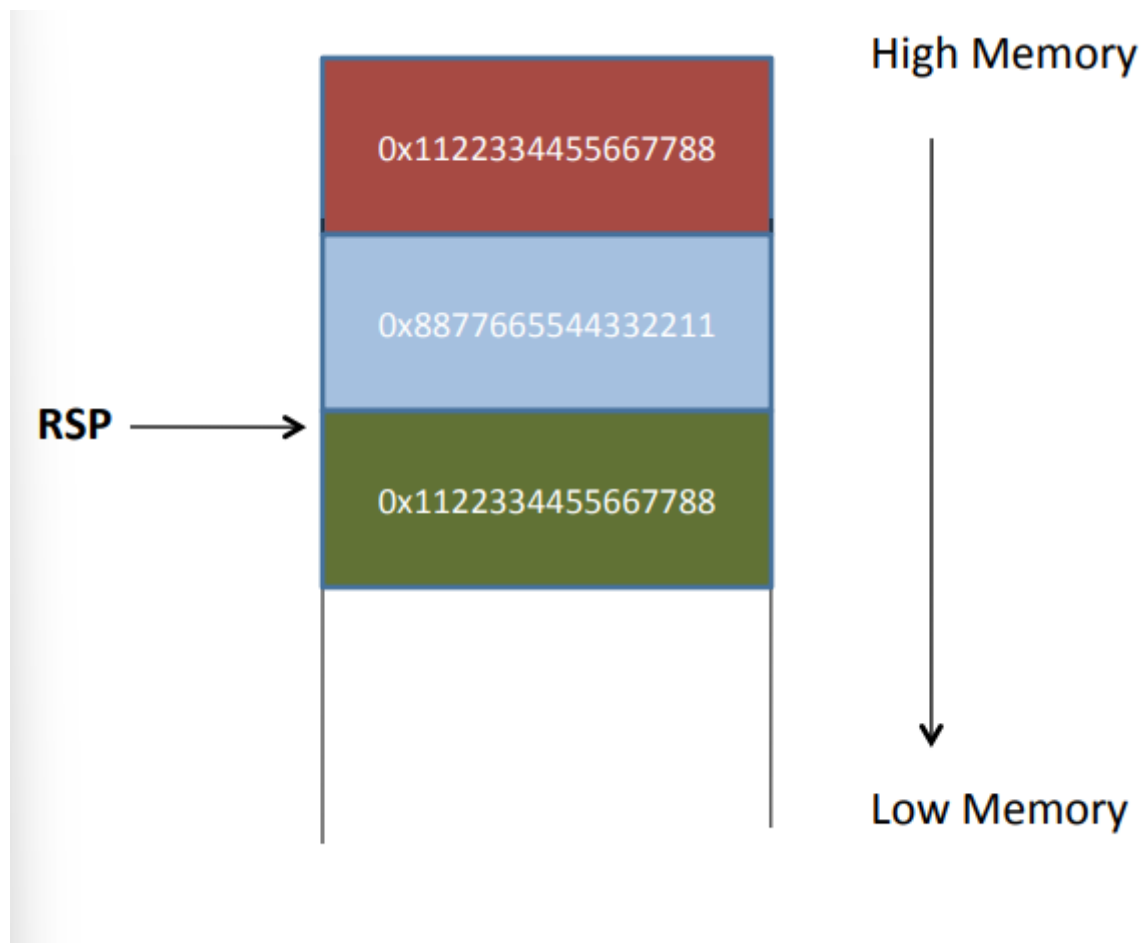# Stack

- It grows from high memory to low memory

- Top is always RSP Pointer

- RSP moves 8 bytes up and down According to push and pop

PUSH – Pushes a value onto the Stack

POP – Removes the topmost value from the Stack

RSP – Should point to top of Stack

Code :

```asm
global _start

section .text

_start:

    mov rax , 0x1122334455667788
    push rax ;Push to satck



    push qword [sample]
    pop r15
    pop r14
    pop rbx



    ;Exit
    mov rax ,60
    mov rdi , 1

section .data

    sample : db 0xaa , 0xbb, 0xcc ,0xdd, 0xee, 0xff, 0x11, 0x22
```

- To analyze it with gdb use `define hook-stop` inside gdb tui.

- Define `x/4xg` (Will show you the stack)

- `end`

- then Simply do `stepi` to debug forward

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