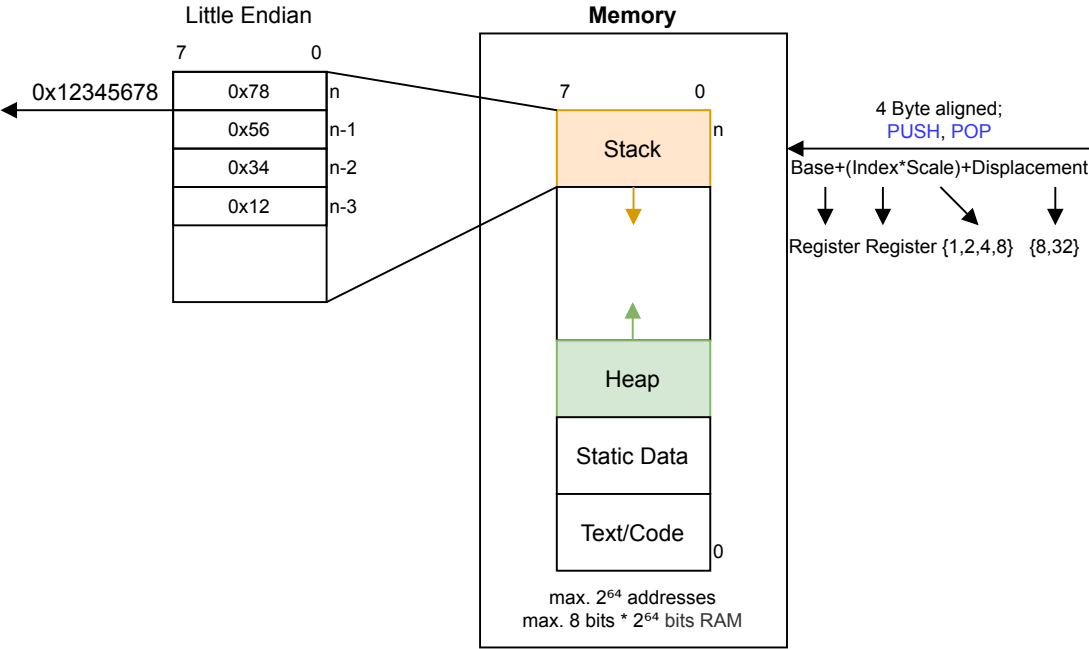


# x64 Cheatsheet



## Calling Conventions

|              |     |              |
|--------------|-----|--------------|
| Argument 1   | RDI | Caller-saved |
| Argument 2   | RSI | Caller-saved |
| Argument 3   | RDX | Caller-saved |
| Argument 4   | RCX | Caller-saved |
| Argument 5   | R8  | Caller-saved |
| Argument 6   | R9  | Caller-saved |
| Return Value | RAX | Caller-saved |

## Calling Conventions (floating point)

|              |      |              |
|--------------|------|--------------|
| Argument 1-8 | XMMi | Caller-saved |
|--------------|------|--------------|

## Callee/Caller-saved registers

|         |              |
|---------|--------------|
| RBX     | Callee-saved |
| RSP     | Callee-saved |
| R10,R12 | Caller-saved |
| R12-15  | Callee-saved |

## 7th argument on stack (64 Bit arguments/variables)

|           |                  |
|-----------|------------------|
| ...       |                  |
| RBP + 16  | 8th parameter    |
| RBP + 8   | 7th parameter    |
| RBP (old) |                  |
| RBP - 8   | local variable 1 |
| RBP - 16  | local variable 2 |
| ...       |                  |

## Words and sizes

|       |         |
|-------|---------|
| BYTE  | 8 bits  |
| WORD  | 16 bits |
| DWORD | 32 bits |
| QWORD | 64 bits |

## ALU

