# X64 Argument Passing

- Registers

- First 6 arguments

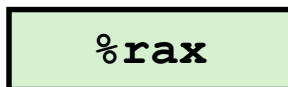| |
|---|
| **%rdi** |
| **%rsi** |
| **%rdx** |
| **%rcx** |
| **%r8** |
| **%r9** |

- Return value

| |
|---|
| **%rax** |

- Stack

| |
|---|
| • • • |
| Arg *n* |
| • • • |
| Arg **8** |
| Arg **7** |
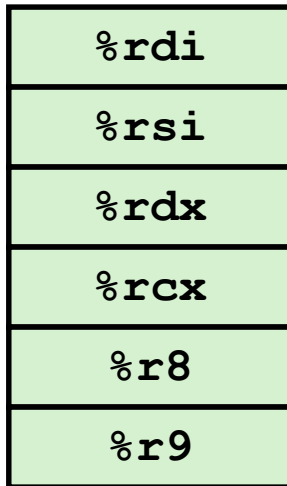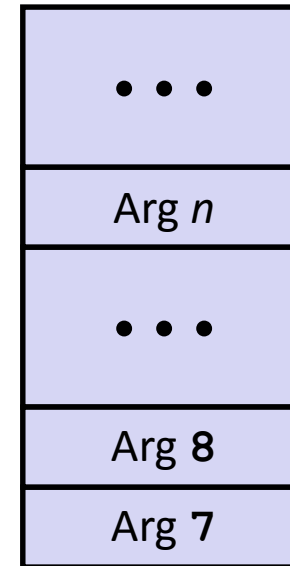
- Only allocate stack space when needed