

# Lecture 3: Types of Registers

There are 14 types of registers

- 1. Accumulator** ← Input / output, Operations, a, ax, eax, rax
- 2. Base** ← Holds address of data b, bx, ebx, rbx
- 3. Counter** ← Counts, used in loop cx, ecx, rcx
- 4. Data** ← Holds data for output d, dx, edx, rdx
- 5. Code Segment** ← Holds address of code segment
- 6. Data Segment** ← Holds address of data segment
- 7. Stack segment** ← Holds address of stack segment
- 8. Extra segment** ← Holds address of data segment
- 9. Source Index** ← Points the source operand
- 10. Destination Index** ← Points the destination operand
- 11. Instruction Pointer** ← Holds the next instruction
- 12. Stack Pointer** ← Points current top of stack
- 13. Flag registers** ← Holds current status of the program
- 14. Base pointer** ← Base of the top of stack

