

Assignment on Microcontroller (Intel - 8051) Laboratory

Write Assembly Language Programs in Intel 8051

1. Load 8-bit hexadecimal data 56H in Accumulator (A) and A5H in R5 register.
2. Load 8-bit hexadecimal data B6H in Accumulator (A) and send it to R3 register.
3. Load 8-bit hexadecimal data B6H in Accumulator (A) and send it to Port-1.
4. Move 8-bit hexadecimal data 34H from memory location 40H to Accumulator.
5. Move 8-bit hexadecimal data A4H from memory location 40H to Accumulator using Indirect Addressing Mode.
6. Load 8-bit hexadecimal data 6AH to memory location 40H.
7. Load 8-bit hexadecimal data 6AH to memory location 40H using Indirect Addressing Mode.
8. Move 8-bit hexadecimal data from memory location 40H to Accumulator and R2 register.
9. Move 8-bit hexadecimal data from memory location 40H to Accumulator and R2 register using Indirect Addressing Mode.
10. Move 8-bit hexadecimal data from memory location 40H to 50H.
11. Move 8-bit hexadecimal data from memory location 40H to 50H using Indirect Addressing Mode.
12. Load 16-bit hexadecimal data D356H in DPTR register.
13. Load the memory address 65H in stack pointer register SP.
14. Initialize stack pointer register SP with memory address 65H, Load 8-bit hexadecimal data 56H in Accumulator and push it to stack pointer register, SP.
15. Initialize stack pointer register SP with memory address 65H, Load 8-bit hexadecimal data 56H in Accumulator, D5H in R6 register. Push contents of A (E0 H) and R6 (06 H) to stack pointer register, SP.
16. Initialize stack pointer register SP with memory address 65H, Load 8-bit hexadecimal data 56H in Accumulator. Push it to stack pointer register, SP and Pop to R5 (05 H) register.
17. Get data from Port-0 send it to Port-1.
18. Push the data of R1, R2, R3 and Pop them to R5, R6, R7.