SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Coimbatore-35

DEPARTMENT OF BIOMEDICAL ENGINEERING

Largest Number

III Year/ VI Sem

Dr. K. Manoharan,
ASP / BME / SNSCT

Largest Number

```
ORG 0000H          ; Start of program
MOV R0, #30H       ; Load pointer to the start of the array (30H)
MOV R2, #05H       ; Load count (number of elements in the array)
MOV A, @R0         ; Load first number into A (assume first number is
max)
INC R0             ; Move to next number
LOOP:
   MOV B, @R0      ; Load next number into B
   CJNE A, B, CHECK ; Compare A with B
   JMP NEXT        ; If A == B, move to next
CHECK:
   JNC NEXT        ; If A >= B, skip update
   MOV A, B        ; Else, update A with the larger value
NEXT:
   INC R0          ; Move to next number
   DJNZ R2, LOOP   ; Repeat for remaining numbers
MOV 50H, A         ; Store the largest number in memory location 50H
END
```

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Sum of N Number

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Sum of N Number

```
ORG 0000H        ; Start of the program
MOV R0, #30H     ; Load pointer to the start of the array (30H)
MOV R2, #05H     ; Load count (number of elements in the array)
MOV A, #00H      ; Clear accumulator (initialize sum to 0)
LOOP:
   ADD A, @R0    ; Add value at address R0 to A
   INC R0        ; Move to the next number
   DJNZ R2, LOOP ; Repeat for remaining numbers
MOV 50H, A       ; Store the sum in memory location 50H
END
```

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Code Converter

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Binary to Hex

```
ORG 0000H        ; Start of the program
MOV A, #5AH      ; Example binary input (90 in decimal, 5A in hex)
MOV B, A         ; Copy A to B for later use
ANL A, #0F0H     ; Mask lower nibble (keep upper nibble only)
SWAP A           ; Swap nibbles to move the upper nibble to lower
MOV 50H, A       ; Store the upper nibble in memory (50H)
MOV A, B         ; Restore original value
ANL A, #0FH      ; Mask upper nibble (keep lower nibble only)
MOV 51H, A       ; Store the lower nibble in memory (51H)
END
```

Binary to Decimal BCD Conversion

```
ORG 0000H        ; Start of the program
MOV A, #65H      ; Example binary input (101 in decimal)
MOV B, #0AH      ; Load divisor (10 decimal)
DIV AB           ; A = Quotient, B = Remainder
MOV 50H, A       ; Store quotient (MSD) in memory (50H)
MOV 51H, B       ; Store remainder (LSD) in memory (51H)
END
```