Computer science II

Experiment No. 1

1. Write A Program to load all register with data F9 H.. [20]
2. Enter the program on the microprocessor kit [5]
3. Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 2

a) Write a program to fill a block of 5 memory locations starting from C040 H alternatively with 00 H and F9 H. [20]
b) Enter the program on the microprocessor kit [5]
c) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 3

a) Write a program to find 1's complement of 5 numbers starting from C040 H, store the result in same memory location. [20]
b) Enter the program on the microprocessor kit [5]
c) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 4

a) Write a program to transfer data in a block of 5 memory location, starting from C035 another block starting from C045 in reverse order. [20]
b) Enter the program on the microprocessor kit [5]
c) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

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Experiment No. 5

a) Write a program to exchange the data in a block of 5 memory locations starting from C035 H with another block starting from C045 H. [20]

b) Enter the program on the microprocessor kit [5]

c) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 6

a) Write a program to add 2 numbers of 4 bytes each. The first No. Starts from C035 and the 2nd number starts from C045 as Lab store the result in C045. [20]

b) Enter the program on the microprocessor kit [5]

c) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 7

d) Write a program to separate the digit of numBers started at C020 H. Store the digits in C021 H, C023 H, multiply the digits and store the product in next memory location. [20]

e) Enter the program on the microprocessor kit [5]

f) Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]

Experiment No. 8

1. Write a program to count the occurrence of data FF H in a lock of 8 memory location starting from C030 H store the count in C040 H. [20]
2. Enter the program on the microprocessor kit [5]
3. Execute the program. Write the contents of data memory locations before and after execution as well as the contents of the registers used in the program after execution and also the bit contents of all five flags individually. Verify the results. [5]