

Experiment 11

Write & execute an assembly language program to count POSITIVE & Negative numbers in an array of 8 bit n numbers

Answer the following practical related questions:

a) ~~1)~~ List any ten different conditional branching instructions

1) JN (Jump if Not)

2) JAE (Jump if above or equal)

3) JB (Jump if below)

4) JBE (Jump if below or equal)

5) JE (Jump if equal)

6) JG (Jump if greater)

7) JGE (Jump if greater or equal)

8) JL (Jump if Less)

9) JLE (Jump if Less or Equal)

10) JNE (Jump if not Equal)

b) What is function of ACM under interrupt INT 21H?

→ The function INT 21H, function ACM is to terminate a program. Specifically it's used for Program termination in DOS

c) The main difference between instructions & directives in assembly language are-

a) Instruction: These are the actual operations that the CPU performs. Instructions are executed by the processor to perform a specific task, such as moving data, performing arithmetic operation.

b) Directives: These are commands to the assembler itself & don't represent operations for the CPU. Directives provide instructions to the assembler on how to process the source code.

Conclusion:

From this experiment we came to know about conditional branching instructions & interrupt functions.

