

CLAIMS:

1. A computer-implemented method of facilitating processing within a computing environment, the computer-implemented method comprising:
 - obtaining an instruction for execution, the instruction to perform a sign operation of a plurality of sign operations configured for the instruction; and
 - executing the instruction, the executing including:
 - selecting at least a portion of an input operand as a result to be placed in a select location, the selecting being based on a control of the instruction, the control of the instruction indicating a user-defined size of the input operand to be selected as the result;
 - determining a sign code of the result based on a plurality of criteria, the plurality of criteria including a sign operation selected to be performed; a sign of the input operand; a value of the result, obtained based on the control of the instruction and a positive sign code control that controls how a positive sign code is to be encoded; and
 - storing the result and the sign code in the select location to provide a signed output to be used in processing within the computing environment.
2. The computer-implemented method of claim 1, wherein the value of the result is zero, nonzero or not applicable.
3. The computer-implemented method of either of the previous claims, wherein the at least a portion of the input operand comprises a number of select digits of the input operand, the number of select digits specified by the control of the instruction.
4. The computer-implemented method of any one of the preceding claims, wherein the control is provided in an immediate field of the instruction.
5. The computer-implemented method of any one of the preceding claims, wherein the sign operation is specified by the instruction.
6. The computer-implemented method of any one of the preceding claims, wherein the positive sign code control is specified by the instruction.

7. The computer-implemented method of any one of the preceding claims, wherein the plurality of sign operations comprise maintain, complement, forced positive and forced negative.
8. The computer-implemented method of any one of the preceding claims, wherein the executing further includes checking validity of a sign of the input operand, based on another control of the instruction indicating validity is to be checked.
9. A computer system for facilitating processing within a computing environment, the computer system comprising:
- a memory; and
 - a processor in communication with the memory, wherein the computer system is configured to perform a method, said method comprising:
 - obtaining an instruction for execution, the instruction to perform a sign operation of a plurality of sign operations configured for the instruction; and
 - executing the instruction, the executing including:
 - selecting at least a portion of an input operand as a result to be placed in a select location, the selecting being based on a control of the instruction, the control of the instruction indicating a user-defined size of the input operand to be selected as the result;
 - determining a sign code of the result based on a plurality of criteria, the plurality of criteria including a sign operation selected to be performed; a sign of the input operand; a value of the result, obtained based on the control of the instruction, and a positive sign code control that controls how a positive sign code is to be encoded; and
 - storing the result and the sign code in the select location to provide a signed output to be used in processing within the computing environment.
10. The computer system of claim 9, wherein the value of the result is zero, nonzero or not applicable.
11. The computer system of either of claims 9 or 10, wherein the at least a portion of the input operand comprises a number of select digits of the input operand, the number of select digits specified by the control of the instruction.

12. The computer system of any one of claims 9 to 11, wherein the positive sign code control is specified by the instruction.

13. The computer system of any one of claims 9 to 12, wherein the executing further includes checking validity of a sign of the input operand, based on another control of the instruction indicating validity is to be checked.

14. A computer program product for facilitating processing within a computing environment, the computer program product comprising:

a computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing a method according to any of claims 1 to 8.

15. A computer program stored on a computer readable medium and loaded into the internal memory of the system of any one of claims 9 to 13, comprising software code portions, when said program is run on the system, for performing the method of any one of claims 1 to 8.