Float point/ vector operations:

For float point operation:

1. Create a class that is used to change the 16-bit representation of float point to a decimal float point number, and change the decimal float point number to a 16-bit binary format of that number.
2. The stages of Fetch, Decode, memory update, register update, PC update for float point operations are same as those for integer operations. Only the execute stages are different.

In execute stage of float point operation, first change the 16-bit representation to a decimal float point number, then evaluate the addition or subtraction of the decimal values. Finally change the result to 16-bit representation.

For vector operation:

1. The stages of Fetch, Decode, memory update, register update, PC update for vector operations are same as those for scalar operations. Only the execute stages are different. First use the for loop to evaluate the result of addition or subtraction of two operands, and then update the value stored in the specific position of the memory.