Q1: (51-49)\*(172+205)-(17\*2) .

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 17 | 34 | 34 | -34 | -34 | -34 | -34 | -34 | -34 |
| 754 | 754 | 754 | 754 | 754 | 754 | 720 | 720 | 720 |
| X3FFF | X3FFE | X3FFF | X3FFE | X3FFF | X4000 | X3FFF | X4000 | X3FFF |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X3FFB | - | - | - | - | - | - | - | - | - |
| X3FFC | - | - | - | - | - | - | - | - | - |
| X3FFD | - | - | - | - | - | - | - | - | - |
| X3FFE | - | - | 49 | 49 | -49 | -49 | -49 | -49 | 172 |
| X3FFF | - | 51 | 51 | 51 | 51 | 51 | 51 | 2 | 2 |
| SP | X4000 | X3FFF | X3FFE | X3FFF | X3FFE | X3FFF | X4000 | X3FFF | X3FFE |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |
| 205 | 205 | 205 | 205 | 205 | 205 | 205 | 205 | 2 | 2 |
| 172 | 172 | 172 | 377 | 377 | 377 | 377 | 17 | 17 | 17 |
| 2 | 2 | 2 | 2 | 2 | 2 | 754 | 754 | 754 | 754 |
| X3FFD | X3FFE | X3FFF | X3FFE | X3FFF | X4000 | X3FFF | X3FFE | X3FFD | X3FFE |

Blue marks the position of the stack pointer, the part above the stack pointer is not in the stack memory, but the memory content does not change after the pop.

Q2: When M=0, the other 3D form 5\*7\*9=315 addresses. So when M=2, there are 2\*315=630 addresses. Similarly, when 4=5, there are 630+4\*(7\*9)=882 addresses. And when P=3, there are 882+3\*9=909 address. Lastly, when Q=5, the address is 909+5=914. x4000+914d=x4392. In the end, the address of A[2,4,3,5] is x4392.