Solution

① Port A address — 0000H
Port B address — 0001H
Port C add — 0002H
CWR. — 0003H

A_{15}	A_{14}	A_{13}	A_{12}	A_{11}	A_{10}	A_9	A_8	A_7	A_6	A_5	A_4	A_3	A_2	A_1	A_0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Port A selection

⇓

These are zeros bubbled NAND gate act as OR Gate which gives '0' O/P when all I/Ps are zeros.

address — 0000H (PA)

A_{15}	A_{14}	A_{13}	A_{12}	A_{11}	A_{10}	A_9	A_8	A_7	A_6	A_5	A_4	A_3	A_2	A_1	A_0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Port B selection

10 - PC selection

11 - CWR selection

② CWR content

1 0 0 1 1 1 0 0 ⇒ 9CH (CWR content)

③ Program

```
LDA 0000H. [Read Port A which is I/P].
STA 0001H [move data from Port A to Port B]
HLT
```