

BSR mode Programs

7	6	5	4	3	2	1	0
1	X	X	X	1	1	0	1

7th bit = 0 for BSR mode

6th bit, 5th bit and 4th bit = undefined
make 0

3rd | 2nd | 1st

1	1	1	— PC ₇
1	1	0	— PC ₆
1	0	1	— PC ₅
1	0	0	— PC ₄
0	1	1	— PC ₃
0	1	0	— PC ₂
0	0	1	— PC ₁
0	0	0	— PC ₀

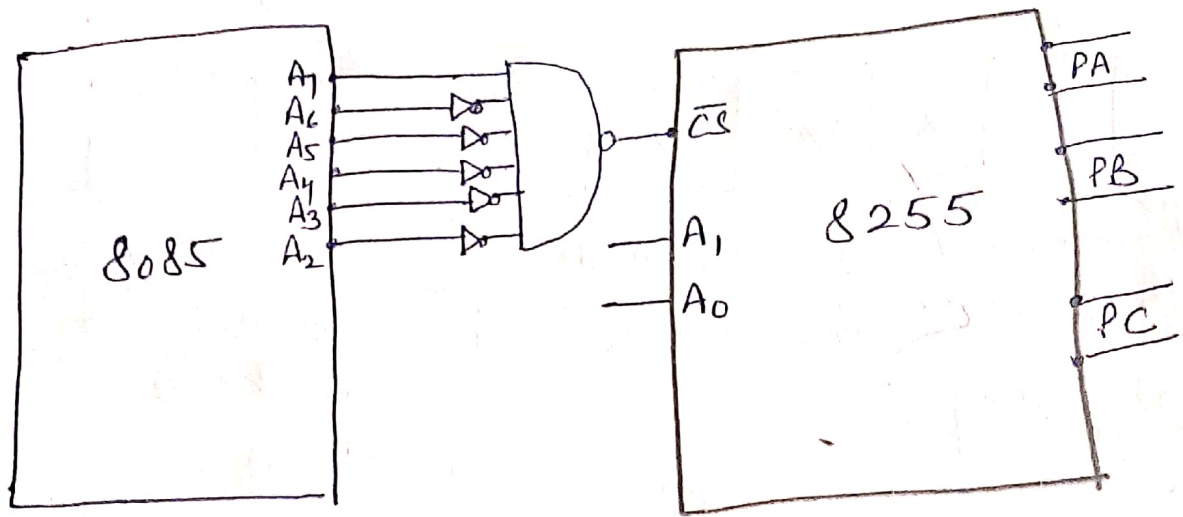
0th bit.

→ 1 — Set
0 — Reset

Que Write BSR control word subroutine to set bits PC₇ and PC₅ and reset them after 10ms. Use diagram given below for Port address.

Solⁿ

- ① Identify port address
- ② Identify the content of control register
- ③ Then program for given statement.



Port Address
 Control word A₇ A₆ A₅ A₄ A₃ A₂ A₁ A₀ → 83H
 1 0 0 0 0 0 1 1

Port C A₇ A₆ A₅ A₄ A₃ A₂ A₁ A₀ 82H
 1 0 0 0 0 0 1 0

To set bit PC₇ = D₇ D₆ D₅ D₄ D₃ D₂ D₁ D₀ 0FH
 0 0 0 0 1 1 1 1

To reset bit PC₇ = 000001110 0EH

To set bit PC₃ = 00000111 07H

to reset bit PC₃ = 00000110 06H

MVI A, 0FH

OUT 83H

MVI A, 07H

OUT 83H

CALL DELAY

MVI A, 06H

OUT 83H

MVI A, 0EH

OUT 83H RET