WRITE A PROGRAM TO CHECK THE CONTENT O FLOCATION C1001 IF IT IS 00 THEN PERFORM AND OPERATION. IF IT IS 01, THEN PERFORM OR OPERATION, IF IT IS 10 THEN PERFORM XOR OPERATION IF IT IS 11 THEN PERFORM NOR OPERATION. IF OPERANDS ARE STORED AT MEMOERY LOCATION C002 AND C003 AND RESULT NEED TO BE UPDATED IN C004

```
#
MVI C001, 10
MVI C002, 00
MVI C003, 11
LDA C001
I1: CMI 00;
JZ I1(AND
I2: CMI 01;
JZ I2(OR)
I3: CMI 10;
JZ I3(NOR)
I4: CMI 11;
JZ I4(XOR)


AND: LDA C002
MOV B,A
LDA C003
ANA B
STA C004
HLT

OR: LDA C002
MOV B,A
LDA C003
ORA B
STA C004
HLT

NOR: LDA C002
MOV B,A
LDA C003
ORA B
CMA
STA C004
HLT

XOR: LDA C002
MOV B,A
LDA C003
XRA B
STA C004
HLT
```