

# 实验七 综合验证

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## 实验源码

使用提供的代码进行综合验证。

## 测试结果

测试一结果：

```
# *****
# *          THE FOLLOWING DEBUG TASKS ARE AVAILABLE:          *
# *  load the 1st diagnostic program, then continue simulation. *
#
# ***                RUNNING CPUtest1                ***
# *** (THIS TEST SHOULD HALT WITH PC = 17) ***
#
# PC      INSTR      OP      DATA      ADR
# --      -
# xx      HLT        0      zz      00
# 00      JMP        7      fe      00
# 1e      JMP        7      e3      1e
# 03      LDA        5      ba      03
# 04      SKZ        1      20      04
# 06      LDA        5      bb      06
# 07      SKZ        1      20      07
# 08      JMP        7      ea      08
# 0a      STO        6      dc      0a
# 0b      LDA        5      ba      0b
# 0c      STO        6      dc      0c
# 0d      LDA        5      bc      0d
# 0e      SKZ        1      20      0e
# 10      XOR        4      9b      10
# 11      SKZ        1      20      11
# 12      JMP        7      f4      12
# 14      XOR        4      9b      14
# 15      SKZ        1      20      15
# 17      HLT        0      00      17
#
# ***      A HALT INSTRUCTION WAS PROCESSED      ***
```

测试二结果：

```

# ***          RUNNING CPUtest2          ***
# *** (THIS TEST SHOULD HALT WITH PC = 10) ***
#
# PC      INSTR      OP      DATA      ADR
# --      - - - - -  --      - - - -  - - -
# xx      HLT        0       zz       00
# 00      LDA        5       bb       00
# 01      AND        3       7c       01
# 02      XOR        4       9b       02
# 03      SKZ        1       20       03
# 05      ADD        2       5a       05
# 06      SKZ        1       20       06
# 07      JMP        7       e9       07
# 09      XOR        4       9c       09
# 0a      ADD        2       5a       0a
# 0b      STO        6       dd       0b
# 0c      LDA        5       ba       0c
# 0d      ADD        2       5d       0d
# 0e      SKZ        1       20       0e
# 10      HLT        0       00       10
#
# ***      A HALT INSTRUCTION WAS PROCESSED      ***

```

测试三结果：

```

# ***          RUNNING CPUtest3          ***
# *** This program calculates the fibonacci ***
# *** number sequence from 0 to 144      ***
#
#          FIBONACCI NUMBER
#          - - - - -
#          0
#          1
#          1
#          2
#          3
#          5
#          8
#          13
#          21
#          34
#          55
#          89
#          144
#
# ***      A HALT INSTRUCTION WAS PROCESSED      ***

```

测试结果表明，模块设计正确，各个功能工作正常。