ASSIST/I Version 2.03, Copyright 1984, BDM Software. GRADE RUN FOR:

PAGE 1

LOC OBJECT CODE ADDR1 ADDR2 STMT SOURCE STATEMENT

1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2 \* \*

3 \* MICHAEL BEAVER \*

4 \* CS 310, SPRING 2013 \*

5 \* PROGRAM 1 \*

6 \* DUE: FEBRUARY 20, 2013 \*

7 \* \*

8 \* DESCRIPTION: \*

9 \* THIS PROGRAM EXPECTS AS INPUT \*

10 \* AN UNKNOWN NUMBER OF DATA \*

11 \* LINES. EACH DATA LINE CONTAINS \*

12 \* THREE INTEGERS (SEPARATED \*

13 \* BY ONE OR MORE BLANKS). THE \*

14 \* PROGRAM THEN DETERMINES THE \*

15 \* LARGEST VALUE ON EACH LINE AND \*

16 \* PRINTS THE VALUE. THE PROGRAM \*

17 \* ALSO SUMS UP THE LARGEST \*

18 \* VALUES. THE SUM IS PRINTED. \*

19 \* \*

20 \* NOTE: \*

21 \* COMPLETELY BLANK DATA LINES \*

22 \* ARE TREATED AS HAVING THE \*

23 \* SAME DATA AS THE PREVIOUS \*

24 \* DATA LINE. \*

25 \* \*

26 \* REGISTER KEY: \*

27 \* REG2 -> 1ST VALUE ON LINE \*

28 \* REG3 -> 2ND VALUE ON LINE \*

29 \* REG4 -> 3RD VALUE ON LINE \*

30 \* REG5 -> LARGEST VALUE ON LINE \*

31 \* REG6 -> SUM OF LARGEST VALUES \*

32 \* \*

33 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

000000 35 BEAVER1 START

37 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

38 \* \*

39 \* BEGINNING HOUSEKEEPING \*

40 \* \*

41 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

000000 90EC D00C 0000C 42 STM 14,12,12(13)

000004 05C0 43 BALR 12,0

000006 44 USING SAVING,12

000006 50D0 C07E 00084 45 SAVING ST 13,SAVEAREA+4

00000A 41D0 C07A 00080 46 LA 13,SAVEAREA

48 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

49 \* \*

50 \* MAIN PROGRAM BODY \*

51 \* \*

52 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

00000E 1B66 53 SR 6,6 ZERO-OUT REG6 FOR ACCUMULATOR

55 \*

56 \* READ UNTIL EOF

57 \*

000010 E000 C0C2 0050 000C8 58 TOPREAD XREAD CARD,80

000016 4740 C05E 00064 59 BC B'0100',ENDREAD EOF => EXIT THE LOOP

61 \*

62 \* RETRIEVE THE THREE VALUES

63 \*

00001A 5320 C0C2 000C8 64 XDECI 2,CARD RETRIEVE 1ST NUMBER ON LINE

00001E 5331 0000 00000 65 XDECI 3,0(1) RETRIEVE 2ND NUMBER ON LINE

000022 5341 0000 00000 66 XDECI 4,0(1) RETRIEVE 3RD NUMBER ON LINE

68 \*

69 \* COMPARE NUMBERS

70 \*

000026 1923 71 IF CR 2,3

000028 47A0 C02A 00030 72 BC B'1010',THEN 1ST NUMBER >= 2ND NUMBER

00002C 4740 C030 00036 73 BC B'0100',ELSE 1ST NUMBER < 2ND NUMBER

000030 1924 74 THEN CR 2,4

000032 47A0 C03A 00040 75 BC B'1010',SAVE1 1ST NUMBER IS LARGEST

000036 1934 76 ELSE CR 3,4

000038 47A0 C040 00046 77 BC B'1010',SAVE2 2ND NUMBER IS LARGEST

00003C 4740 C046 0004C 78 BC B'0100',SAVE3 3RD NUMBER IS LARGEST

80 \*

81 \* 1ST NUMBER IS LARGEST, SO SAVE IT

82 \*

000040 1852 83 SAVE1 LR 5,2

000042 47F0 C048 0004E 84 BC B'1111',PRINT

86 \*

87 \* 2ND NUMBER IS LARGEST, SO SAVE IT

88 \*

000046 1853 89 SAVE2 LR 5,3

000048 47F0 C048 0004E 90 BC B'1111',PRINT

92 \*

93 \* 3RD NUMBER IS LARGEST, SO SAVE IT

94 \*

00004C 1854 95 SAVE3 LR 5,4

97 \*

98 \* OUTPUT LARGEST NUMBER

99 \*

00004E 5250 C113 00119 100 PRINT XDECO 5,OUTLINE

000052 E020 C11F 0017 00125 101 XPRNT LRGHEAD,23

000058 E020 C112 000D 00118 102 XPRNT CARRIAGE,13

00005E 1A65 104 AR 6,5 ADD LARGEST VALUE TO SUM

000060 47F0 C00A 00010 105 BC B'1111',TOPREAD

107 \*

108 \* OUTPUT SUM OF LARGEST VALUES

109 \*

000064 5260 C113 00119 110 ENDREAD XDECO 6,OUTLINE

000068 E020 C136 0017 0013C 111 XPRNT SUMHEAD,23

00006E E020 C112 000D 00118 112 XPRNT CARRIAGE,13

114 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

115 \* \*

116 \* ENDING HOUSEKEEPING \*

117 \* \*

118 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

000074 58D0 C07E 00084 119 L 13,SAVEAREA+4

000078 98EC D00C 0000C 120 LM 14,12,12(13)

00007C 07FE 121 BR 14

123 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

124 \* \*

125 \* DECLARE STORAGE AND CONSTANTS \*

126 \* \*

127 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

000080 128 SAVEAREA DS 18F

0000C8 129 CARD DS CL80

000118 4E 130 CARRIAGE DC C'+'

000119 131 OUTLINE DS CL12

000125 40E3C8C540D3C1D9 132 LRGHEAD DC C' THE LARGEST VALUE IS: '

00013C F040404040404040 133 SUMHEAD DC C'0 THE SUM IS: '

135 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

136 \* \*

137 \* END, DATA ENTRY, AND LITERAL POOL \*

138 \* \*

139 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

140 END BEAVER1

\*\*\* 0 STATEMENTS FLAGGED - 0 WARNINGS, 0 ERRORS

\*\*\* PROGRAM EXECUTION BEGINNING -

ANY OUTPUT BEFORE EXECUTION COMPLETE MESSAGE IS PRODUCED BY USER PROGRAM \*\*\*

THE SUM IS: 0

\*\*\* EXECUTION COMPLETED \*\*\*