;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

;COMPARA R5 COM R6 SE R5 FOR MENOR DIVIDA R6 POR 2 ATÉ R5 FICAR MAIOR

**COMP:** **mov.w** #5,R5

**mov.w** #24,R6

**LOOP:** **cmp.w** R6,R5 ;comparar R5(Referencia) com R6

**jhs** FIM

**MENOR:** **rra** R6 ;R6/2

**jmp** LOOP

**FIM:**

**jmp** $

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**ordv:** **mov** #vetor,R5

**call** #loop

**loop:** **mov** #5,R9

**mov** #2,R6

**clr** R5

**call** #ordena

**ordena:** **add** #2,R5

**add** #2,R6

**cmp** vetor(R5),vetor(R6)

**jlo** troca1

**dec** R9

**jnz** ordena

**nop**

**nop**

**jmp** $

**troca1:** **mov** vetor(R5),R7

**mov** vetor(R6),R8

**mov** R8,vetor(R5)

**mov** R7,vetor(R6)

**call** #loop

**.data**

**vetor:** **.word** 4,9,6,4,3

;-------------------------------------------------------------------------------

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**vetLN:** **mov.b** #vetor,R5

**call** #loop

**loop:** **clr** R5

**mov.b** #1,R6

**mov.b** #21,R9

**call** #ordena

**ordena:** **add.b** #1,R5

**add.b** #1,R6

**cmp.b** vetor(R5),vetor(R6)

**jlo** troca

**dec** R9

**jnz** ordena

**jmp** $

**troca:** **mov.b** vetor(R5),R7

**mov.b** vetor(R6),R8

**mov.b** R8,vetor(R5)

**mov.b** R7,vetor(R6)

**call** #loop

**.data**

**vetor:** **.byte** 21,"DANIELMORAES180112333"

;-------------------------------------------------------------------------------

;

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**ex1:** **mov.b** #vetor,R5

**mov.b** #1,R8

**mov.b** #12,R11

**clr** R7

**mov.b** #1,R9

**call** #MENOR

**MENOR:** **add.b** #1,R9

**cmp.b** vetor(R8),vetor(R9)

**jlo** conta

; jeq conta

**dec** R11

**jnz** MENOR

**call** #part2

**conta:** **mov.b** vetor(R9),R6

**mov.b** vetor(R8),R5

**mov.b** R6,vetor(R8)

**mov.b** R5,vetor(R9)

**mov.b** vetor(R8),R6

**add.b** #1,R7

**call** #MENOR

**part2:** **mov.b** #2,R8

**mov.b** #12,R11

**mov.b** #2,R9

**call** #repets

**repets:**

**add.b** #2,R9

**mov.b** vetor(R9),R12

**mov.b** vetor(R8),R13

**sub.b** R12,R13

**jnz** cont

**mov.b** #1,R7

**call** #cont

**cont:** **dec** R11

**jnz** repets

**jmp** $

**.data**

**vetor:** **.byte** 12,"DANIELMORAES"

;-------------------------------------------------------------------------------

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**ex1:** **mov** #vetor,R5

**mov** #2,R8

**mov** #8,R11

**clr** R7

**mov** #2,R9

**call** #MAIOR16

**MAIOR16:** **add** #2,R9

**cmp** vetor(R8),vetor(R9)

**jhs** conta

**dec** R11

**jnz** MAIOR16

**call** #part2

**conta:** **mov** vetor(R9),R6

**mov** vetor(R8),R5

**mov** R6,vetor(R8)

**mov** R5,vetor(R9)

**mov** vetor(R8),R6

**call** #MAIOR16

**part2:** **clr** R7

**mov** #2,R8

**mov** #8,R11

**mov** #2,R9

**call** #repets

**repets:**

**add** #2,R9

**mov** vetor(R9),R12

**mov** vetor(R8),R13

**sub** R12,R13

**jnz** cont

**mov** #1,R7

**call** #cont

**cont:** **dec** R11

**jnz** repets

**jmp** $

**.data**

**vetor:** **.word** 6,"DANIELMORASS",0

;-------------------------------------------------------------------------------

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**ordv:** **mov.b** #vetor,R5

**call** #loop

**loop:** **mov.b** #12,R9

**mov.b** #1,R6

**clr** R5

**call** #ordena

**ordena:** **add.b** #1,R5

**add.b** #1,R6

**cmp.b** vetor(R5),vetor(R6)

**jlo** troca1

**dec** R9

**jnz** ordena

**jmp** $

**troca1:** **mov.b** vetor(R5),R7

**mov.b** vetor(R6),R8

**mov.b** R8,vetor(R5)

**mov.b** R7,vetor(R6)

**call** #loop

**.data**

**vetor:** **.byte** 12,"DANIELMORAES"

;------------------------------------------------------------------------------

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**main:**

**mov.b** #vetor1,R5

**mov.b** #vetor2,R6

**mov.b** #vetor3,R7

**mov.b** #8,R11

**clr** R9

**clr** R8

**call** #loop

**loop:** **add.b** #1,R9

**dec** R11

**jnz** comp1

**call** #part2

**comp1:** **mov.b** vetor1(R9),R10

**and** #BIT0,R10

**jnz** impa1

**call** #par1

**par1:** **dec.b** R8

**dec.b** R8

**add.b** #1,R8

**mov.b** vetor1(R9),vetor3(R8)

**call** #loop

**impa1:** **add.b** #2,R8

**mov.b** vetor1(R9),vetor3(R8)

**call** #loop

**part2:** **mov.b** #6,R11

**call** #loop2

**loop2:** **mov.b** #0,R8

**mov.b** #1,R9

**call** #ordem

**ordem0:** **dec.b** R11

**jnz** ordem

**jmp** $

**ordem:** **add.b** #1,R8

**add.b** #1,R9

**mov.b** vetor3(R8),R10

**and** #BIT0,R10

**jnz** ordem0

**call** #par2

**par2:** **mov.b** vetor3(R8),R12

**mov.b** vetor3(R9),R13

**mov.b** R13,vetor3(R8)

**mov.b** R12,vetor3(R9)

**inc.b** R8

**call** #ordem0

**.data**

**vetor1:** **.byte** 3,3,8,7

**vetor2:** **.byte** 3,2,1,4

**vetor3:** **.byte** 6,0,0,0,0,0,0

;-------------------------------------------------------------------------------

FIBONACCI:

;-------------------------------------------------------------------------------

; Main loop here

;-------------------------------------------------------------------------------

**Start:** **mov.w** #1,R5

**mov.w** #2,R6

**loop:** **mov.w** R5,R7

**add.w** R6,R7

**next:** **mov.w** R6,R5

**mov.w** R7,R6

**fim:** **jmp** loop

;-------------------------------------------------------------------------------