\*----------------------------------------------------------------------

\* Programmer: Arthur Flores

\* Class Account: masc0200

\* Assignment or Title: Assignment 1

\* Filename: prog1.s

\* Date completed: 10/14/14

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\* Problem statement:

\* Input:

\* Output:

\* Error conditions tested:

\* Included files:

\* Method and/or pseudocode:

\* References:

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ORG $0

DC.L $3000 \* Stack pointer value after a reset

DC.L start \* Program counter value after a reset

ORG $3000 \* Start at location 3000 Hex

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#minclude /home/ma/cs237/bsvc/iomacs.s

#minclude /home/ma/cs237/bsvc/evtmacs.s

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\* Register use

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start: initIO \* Initialize (required for I/O)

setEVT \* Error handling routines

\* initF \* For floating point macros only

lineout title \*prints title

lineout prompt1 \*prints user to enter integer

linein buffer \*read user input

cvta2 buffer,D0 \*converts input to 2's complement

mulu #12,D0 \*multiplies user input by 12

lea array,A1 \*load effective address array in A1

adda.l D0,A1 \*adds user input times 12 to arrays address

move.l (A1),number \*moves contents of A1 into number

adda.l #4,A1 \*adds 4 so more word can be read

move.l (A1),number+4 \*place contents of A1 into num plus 4

adda.l #4,A1 \*add 4 to A1 to get last piece 4 charc of word

move.l (A1),number+8 \*place contents of A1 in num plus 8

lineout answer \*print english word of int on screen

break \* Terminate execution

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\* Storage declarations

title: dc.b 'Program #1, Arthur Flores, masc0200',0

prompt1: dc.b 'Enter an integer in the range 0 .. 20:',0

buffer: ds.b 81

array: dc.b 'zero. ',0

dc.b 'one. ',0

dc.b 'two. ',0

dc.b 'three. ',0

dc.b 'four. ',0

dc.b 'five. ',0

dc.b 'six. ',0

dc.b 'seven. ',0

dc.b 'eight. ',0

dc.b 'nine. ',0

dc.b 'ten. ',0

dc.b 'eleven. ',0

dc.b 'twelve. ',0

dc.b 'thirteen. ',0

dc.b 'fourteen. ',0

dc.b 'fifteen. ',0

dc.b 'sixteen. ',0

dc.b 'seventeen. ',0

dc.b 'eighteen. ',0

dc.b 'nineteen. ',0

dc.b ‘twenty. ',0

dc.b 0

answer: dc.b 'The number you entered was '

number: ds.b 12

end