```
1.d
              $f0,a($sp)
                                 #load scalar a
              $t0,$s0,#512
      addiu
                                 #upper bound of what to load
loop: 1.d
               $f2,0($s0)
                                 \#load x(i)
      mul.d
               $f2,$f2,$f0
                                 \#a \times x(i)
               $f4,0($s1)
                                 #load y(i)
      1.d
               $f4,$f4,$f2
                                 \#a \times x(i) + y(i)
      add.d
               $f4,0($s1)
                                 #store into y(i)
      s.d
      addiu
               $s0,$s0,#8
                                 #increment index to x
               $s1,$s1,#8
      addiu
                                 #increment index to y
               $t1,$t0,$s0
      subu
                                 #compute bound
                                 #check if done
      bne
               $t1,$zero,loop
```

Unn Fig. 6-3.