```
# Chuong trinh: day float
# ham nhap_pt, xuat_pt, max_day, min_day
#---------------------------------
          .include  "macro.mac"
# Data segment
          .data
# Cac dinh nghia bien
arr_f:    .space    20          # day so thuc 5 phan tu
int_n:    .word     5           # so phan tu (spt)
flo_max:  .float    1.3
flo_min:  .float    1.4
# Cac cau nhac nhap du lieu
nhap_day: .asciiz   "Nhap phan tu day:\n"
nhap_s1:  .asciiz   "f["
nhap_s2:  .asciiz   "]: "
xuat_day: .asciiz   "Day da nhap:\n"
xuat_max: .asciiz   "Phan tu lon nhat = "
xuat_min: .asciiz   "Phan tu nho nhat = "
#---------------------------------
# Code segment
          .text
#---------------------------------
# Chuong trinh chinh
#---------------------------------
main:
# Nhap (syscall)
  # goi nhap_pt
          la        $a0,arr_f
          lw        $a1,int_n
          jal       nhap_pt
# Xu ly
  # goi maxday
          la        $a0,arr_f
          lw        $a1,int_n
          jal       maxday
          swc1      $f0,flo_max
  # goi minday
          la        $a0,arr_f
          lw        $a1,int_n
          jal       minday
          swc1      $f0,flo_min
# Xuat ket qua (syscall)
  # goi xuat_pt
          la        $a0,arr_f
          lw        $a1,int_n
          jal       xuat_pt
          linefeed
  # xuat max
          putf_p    xuat_max,flo_max
          linefeed
  # xuat min
          putf_p    xuat_min,flo_min
# Ket thuc chuong trinh (syscall)
Kthuc:    addi      $v0,$zero,10
```

```
          syscall
#---------------------------------
# ham nhap_pt: nhap phan tu day
# In: a0=addr(f[]), a1=so phan tu
# Out: none
# Reserved: none
#---------------------------------
nhap_pt:
  #a2=addr(f[i]),s0=i(=0)
          add       $a2,$a0,$zero  # doi con tro qua a2
  #xuat cau nhac chung
          puts      nhap_day
  #for1(i=0;i<spt;i++)
          addi      $s0,$zero,0         #i=0
fcond1:   beq       $s0,$a1,endfor1     #kiem tra (i==n)
    #xuat cau nhac va nhap tung phan tu
          puts      nhap_s1
          add       $a0,$s0,$zero       # chi so i
          addi      $v0,$zero,1
          syscall
          puts      nhap_s2
          addi      $v0,$zero,6         # nhap so thuc
          syscall
          swc1      $f0,0($a2)          # luu f[i]
  #floop1
          addi      $s0,$s0,1
          addi      $a2,$a2,4
          j         fcond1
  #endfor1
endfor1:
          jr        $ra
#---------------------------------
# ham xuat_pt: xuat phan tu day
# In: a0=addr(f[]), a1=so phan tu
# Out: none
# Reserved: none
#---------------------------------
xuat_pt:
  #a2=addr(f[i]),s0=i(=0)
          add       $a2,$a0,$zero
  #xuat cau nhac chung
          puts      xuat_day
  #for2(i=0;i<spt;i++)
          addi      $s0,$zero,0
fcond2:   beq       $s0,$a1,endfor2
          lwc1      $f12,0($a2)         # xuat f[i]
          addi      $v0,$zero,2
          syscall
          putch     '\t'                # ky tu TAB
  #floop2
          addi      $s0,$s0,1
          addi      $a2,$a2,4
          j         fcond2
  #endfor2
```

```
endfor2:
          jr        $ra
#-----------------------------------
# ham maxday: tim phan tu lon nhat
# I: a0=addr(f[]), a1=so phan tu
# O: f0=max
# Reserved: none
#-----------------------------------
maxday:
  #a0=addr(f[i]),f0=max(=f[0]),f1=f[i],s2=i(=1)
          lwc1      $f0,0($a0)          # max=f[0]
  #for3(max=f[0],i=1;i<spt;i++)
          addi      $s0,$zero,1         #i=1
          addi      $a0,$a0,4           #addr(f[1])
fcond3:   beq       $s0,$a1,endfor3
    #if3 (f[i]>max)
          lwc1      $f1,0($a0)          #f[i]
          c.lt.s    $f0,$f1             #kiem tra (max<f[i])
          bc1f      endif3              #sai, bo qua then
    # then3:max=a[i]
          mov.s     $f0,$f1
    # endif3
endif3:
  #floop3
          addi      $s0,$s0,1
          addi      $a0,$a0,4
          j         fcond3
  #endfor3
endfor3:  # tri tra ve trong f0
          jr        $ra
#-----------------------------------
# ham minday: tim phan tu nho nhat
# I: a0=addr(a[]), a1=so phan tu
# O: f0=min
# Reserved: none
#-----------------------------------
minday:
  #a0=addr(a[i]),f0=min(=f[0]),f1=f[i],s0=i(=1)
          lwc1      $f0,0($a0)
  # for4(min=f[0],i=1;i<spt;i++)
          addi      $s0,$zero,1
          addi      $a0,$a0,4
fcond4:   beq       $s0,$a1,endfor4
    #if4 (a[i]<min)
          lwc1      $f1,0($a0)
          c.lt.s    $f1,$f0             #kiem tra (a[i]<min)
          bc1f      endif4              #sai, bo qua then
    #then4:min=a[i]
          mov.s     $f0,$f1
    #endif4
endif4:
  #floop4
          addi      $s0,$s0,1
          addi      $a0,$a0,4
```

```
          j         fcond4
  #endfor4
endfor4:  # tri tra ve trong f0
          jr        $ra
#---------------------------------
```