```
# Chuong trinh: da thuc bac 3 (Horner)
# f(1)= -4; f(-2)= 2
# "f(" | 1 | ")= " | -4
# Xuat_kq1 -> int_x -> Xuat_kq2 -> int_f
#-----------------------------------
# Data segment
     .data
# Cac dinh nghia bien
int_a:    .word     1
int_b:    .word     2
int_c:    .word     3
int_d:    .word     4
int_x:    .word     15
int_f:    .word     21
# Cac cau nhac nhap du lieu
Nhap_x:   .asciiz   "Nhap x: "
Xuat_kq1: .asciiz   "f("
Xuat_kq2: .asciiz   ")= "
#-----------------------------------
# Code segment
     .text
     .globl    main
#-----------------------------------
# Chuong trinh chinh
#-----------------------------------
main:
#Nhap (syscall)
  # Nhap x
     la   $a0,Nhap_x
     addi $v0,$zero,4
     syscall
     addi $v0,$zero,5
     syscall
     sw   $v0,int_x
#Xu ly
  # t0=a/f, t1=x, t2=b/c/d
     lw   $t0,int_a
     lw   $t1,int_x
  # f=a.x
     mul  $t0,$t0,$t1
  # f=a.x+b              [f+b]
     lw   $t2,int_b
     add  $t0,$t0,$t2
  # f=(a.x+b).x          [f.x]
     mul  $t0,$t0,$t1
  # f=(a.x+b).x-c        [f-c]
     lw   $t2,int_c
     sub  $t0,$t0,$t2
  # f=((a.x+b).x-c).x    [f.x]
     mul  $t0,$t0,$t1
  # f=((a.x+b).x-c).x-d  [f-d]
     lw   $t2,int_d
     sub  $t0,$t0,$t2
     sw   $t0,int_f       # luu ket qua
```

```
#Xuat ket qua (syscall)
     la   $a0,Xuat_kq1
     addi $v0,$zero,4
     syscall
     lw   $a0,int_x
     addi $v0,$zero,1
     syscall
     la   $a0,Xuat_kq2
     addi $v0,$zero,4
     syscall
     lw   $a0,int_f
     addi $v0,$zero,1
     syscall
#ket thuc chuong trinh (syscall)
Kthuc:    addiu     $v0,$zero,10
     syscall
#---------------------------------
```