作業#13

➢ 假設某人找工作的需求為「錢多事少離家近，
公司賺錢股價高」，其模糊值設定如右：
➢ 今有四個工作機會，其事實定義及資料如後
➢ 某人對於這五個條件的重要性分別為1.0, 0.7, 0.5,
0.1, 0.2，請計算這四個工作機會符合需求的程度
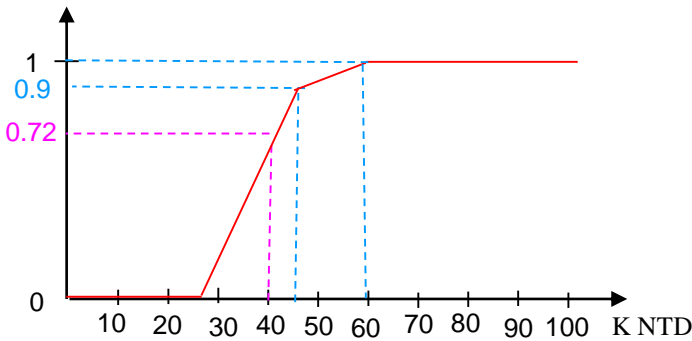

```
(defrule match-pay
   (declare (CF 1.0))
   (job (ID ?id) (pay High))
   =>
   (assert (high-pay ?id)))
```

(declare (CF n)) 規則的CF確定程度n值可以作為滿足此條件的重
要程度(權重值)，40000滿足薪水高(high-pay ?id)事實的CF值
即為薪水高(High)的符合程度乘以此條件的權重值 = 0.72*1.0
(get-cf ?f1) 可以取得 ?f1 事實的CF值
五個條件的權重加總為1+0.7+0.5+0.1+0.2=2.5，取加權平均值(/2.5)
作為工作機會的符合程度(Degree)

```
FuzzyCLIPS> (run)
Job: 4  Degree: 0.56256000000001
Job: 3  Degree:
Job: 2  Degree:        ?
Job: 1  Degree:
```

```
(deftemplate salary
   0 100000 NTD
   (
      (High (25000 0) (45000 0.9) (60000 1))
   )
)
(deftemplate hours
   0 168 HOUR
   (
      (Low (20 1) (40 0.7) (50 0))
   )
)
(deftemplate distance
   0 300 KM
   (
      (Near (5 1) (20 0.8) (100 0))
   )
)
(deftemplate profit
   0 10000 M
   (
      (High (10 0) (100 1))
   )
)
(deftemplate stock-price
   0 3000 NTD
   (
      (High (10 0) (100 0.8) (500 1))
   )
)
```

```
(deftemplate job
    (slot ID)
    (slot pay (type FUZZY-VALUE salary))
    (slot working-hours (type FUZZY-VALUE hours))
    (slot away-from (type FUZZY-VALUE distance))
    (slot company-profit (type FUZZY-VALUE profit))
    (slot company-stock (type FUZZY-VALUE stock-price))
)

(deffacts initial
    (job (ID 1) (pay (40000 0) (40000 1) (40000 0)) (working-hours (40 0) (40 1) (40 0))
        (away-from (17 0) (17 1) (17 0)) (company-profit (60 0) (60 1) (60 0))
        (company-stock (55 0) (55 1) (55 0)))
    (job (ID 2) (pay (30000 0) (30000 1) (30000 0)) (working-hours (35 0) (35 1) (35 0))
        (away-from (12 0) (12 1) (12 0)) (company-profit (200 0) (200 1) (200 0))
        (company-stock (87 0) (87 1) (87 0)))
    (job (ID 3) (pay (50000 0) (50000 1) (50000 0)) (working-hours (45 0) (45 1) (45 0))
        (away-from (50 0) (50 1) (50 0)) (company-profit (40 0) (40 1) (40 0))
        (company-stock (20 0) (20 1) (20 0)))
    (job (ID 4) (pay (27000 0) (27000 1) (27000 0)) (working-hours (32 0) (32 1) (32 0))
        (away-from (5 0) (5 1) (5 0)) (company-profit (150 0) (150 1) (150 0))
        (company-stock (293 0) (293 1) (293 0)))
)
```

「錢多事少離家近，公司賺錢股價高」

請到雲端學院
下載事實資料
job.txt

CF值皆為預設值1.0(確定的工作機會)