PEMBAHASAN UAS DASPRO 2016/2017

No. 1

IsPrima	**IsPrima (X)**
DEF SPEK IsPrima (X) : integer → boolean {...} NbFaktor (A, N) : 2 integer → integer {Menghasilkan banyaknya faktor dari bilangan N dengan nilai A adalah 1}	

REALISASI
 	
IsPrima (X) :
If NbFaktor (1, X) = 2 then
True
Else
False
 	
NbFaktor (A,N) :
Depend on :
A = N : 1
N mod A = 0 : 1 + NbFaktor (A+1, N)
Else NbFaktor (A+1, N)	

No. 2

Hapus Semua Elemen	**DropElmt (L)**
DEF SPEK DropElmt (L) : List → List kosong {...}	
REALISASI DropElmt (L) : If IsEmpty then L Else DropElmt (Tail L)	

Link soal : https://drive.google.com/file/d/0BzzTdZtgG_S1aFNEWEo5NDR3cEk/view

No. 3

Membuat List Terurut **MakeSortList (L)**

DEF SPEK

```
MakeSortList (L) : List → List
{...}

Min (L) : List → elemen
{mencari elemen terkecil pada list}
```

REALISASI

```
MakeSortList (L) :
    If IsEmpty then
        L
    Else Konso ((Min L) (MakeSortList ((Rember (Min L)) L)))

Min (L) :
    If NbElmt = 1 then
        car L
    Else If (car L) < (Min (cdr L)) then
            car L
        Else Min (cdr L)
```

No. 4

Make Difference **MakeDifference (H1, H2)**

DEF SPEK

```
MakeDifference (H1, H2) : List → List
{...}
```

REALISASI

```
MakeDifference (H1, H2) :
    Depend on H1, H2
        IsEmpty (H1) and IsEmpty (H2) : [ ]
        Not IsEmpty (H1) and IsEmpty (H2) : H1
        IsEmpty (H1) and not IsEmpty (H2) : [ ]
        Not IsEmpty (H1) and not IsEmpty (H2) : {rekurens}
        If (not (IsMember (FirstElmt (H1), H2))) then
            Konso (FirstElmt (H1), MakeDifference (Tail (H1), H2))
        Else MakeDifference (Tail (H1), H2)
```

Link soal : https://drive.google.com/file/d/0BzzTdZtgG_S1aFNEWEo5NDR3cEk/view

No. 5

Sum List of List	**SumLoL (S1 S2)**

DEF SPEK

SumLoL (S1 S2) : 2 List of List → List of List
{...}

IsEqS (S1 S1) : 2 List of List → Boolean
{true jika S1 identik dengan S2}

REALISASI

```
SumLoL (S1, S2) :
    If IsEqS(S1,S2) then
        If IsAtom(FirstList S1) and IsAtom(FirstList S2) then
            Konso ( ((FirstList S1) + (FirstList S2))
                    (SumLoL (TailList S1),(TailList S2)) )
        Else KonsLo ( (SumLoL (FirstList S1),(FirstList S2))
                      (SumLoL (TailList S1),(TailList S2)) )
```

No. 6

Reverse Tree	**ReverseTree (P)**

DEF SPEK

ReverseTree (P) : Pohon tidak kosong → Pohon
{...}

REALISASI

```
ReverseTree (P) :
    If IsEmpty (P) then
        nil
    Else Konso ((Akar P) (Konso ((ReverseTree (Right P)) (Konso ((ReverseTree (Left P)) (nil))))))
```


Link soal : https://drive.google.com/file/d/0BzzTdZtgG_S1aFNEWEo5NDR3cEk/view