HAPPY-)

```
(fun (main)
    (write (fact (read)))
)

(fun (fact x) (
    (if (= x 0)
        (return 1)
        (return (* x (fact (- x 1)))))
    )
))
```

La syntaxe du HAPPY-)

```
// Construit une liste d'entiers
main()
{
    last := null;
    read (x);
    while (x != -1)
    {
        node := new/2;
        node.1 = last;
        node.2 := x;
        last = node;
        read (x);
    }
    y := sum (last);
    write (y);
}

// Calcule la somme des entiers d'une liste
sum (list)
{
    s := 0;
    current := list;
    while (current != null)
    {
        s := s + current.1;
        current := current.2;
    }
    return (s);
}
```