Answers to the exercises for chapter: Lambda calculus

1. \def\IsNil#1{#1{\expandafter\False\gobbletwo}{\True}}
    \test{Detect NIL}{\IsNil\Nil}
    \test{Detect non-NIL}{\IsNil{\Singleton\Nil}}
    Output:
        Detect NIL Detect non-NIL
2. \def\IsOne#1{#1{\IsZero{\Tail{#1}}}}\False}
3. \def\Sub#1#2{#1{\SubFrom{#2}}{#2}}
    \def\SubFrom#1#2#3{#1{\SubMinOne{#3}}\Error}
    \def\SubMinOne#1#2#3{\Sub{#1}{#3}}
    Explanation:

```
    Sub <total> <term>⇒<term> SubFrom<total> Zero
    if <term> is empty⇒then <total>
            otherwise⇒SubFrom<total> <term-head> <term-tail>
                    ⇒<total> SubMinOne<term-tail> Error
                    ⇒SubMinOne<term-tail> <total-head> <total-tail>
                    ⇒Sub <total-tail> <term-tail>
```