School of Computing and Information Systems
The University of Melbourne
COMP90049
Knowledge Technologies (Semester 1, 2017)
Workshop exercises: Week 3

1. Following on from last week, write a **regular expression** which will match a string according to whether it contains a price (like $20 or $0.99, but not 11.30 or 0$1an).

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Suppose that we have observed the token `lended`, and we have a dictionary as follows:

```
addendum
blenders
commodity
deaden
end
leader
leant
lent
lemonade
pleading
```

2. Which, if any, of the above dictionary entries be returned using a Neighbourhood Search with a neighbourhood of 1? 2? 3?

3. With respect to the input string `lended` and the dictionary entry `deaden`, calculate the following:

   (a) the Global Edit Distance, using the parameter $[m, i, d, r] = [+1, -1, -1, -1]$

   (b) the Local Edit Distance, using the parameter $[m, i, d, r] = [+1, -1, -1, -1]$

   (c) the N-Gram Distance, using $n = 2$

4. Find the best approximate match (or matches, if there are ties) in the dictionary for the string `lended`, based on the following methods; consider different parameters where necessary:

   (a) the Global Edit Distance

   (b) the Local Edit Distance

   (c) the N-Gram Distance

   (d) Soundex