

# Interaction Loops

Write a program that prompts a user for a list, then reads the list, reverses the elements of the list and then prints out the reversed list to the terminal. It then returns to prompting the user for a new list, etc.

```
interact:-  
    nl,  
    write('gimme a list> '),  
    read(X),  
    reverse(X,Y),  
    write('this is the reverse: '),  
    write(Y),  
    nl,  
  
    interact. ← Recursion with no arguments!
```

# A Translation Program

Write a program that takes simple English statements and translates them into German. The sentences are given as lists of words.

```
% the dictionary
lookup(logic,logik).
lookup(is,macht).
lookup(fun,spass).
Lookup(A,A). ← Default case for unknown words, just return them

% the translation procedure
translate([],[]).
translate(ES,GS):-
    [W|R]=ES, ← Destructure English sentence
    lookup(W,GW),
    translate(R,GR),
    GS=[GW|GR]. ← Construct German sentence
```

# Assignment

- Assignment #5 – see BrightSpace