Assignment 5   COL226   *Lokesh Acharya 2018CS10352*

In this assignment I mainly implemented:-

1. check_sig
2. wfterm
3. size
4. ht
5. vars
6. subst
7. mgu

Help function:-

8. sym_exist – checks if a given symbol exist in a given signature or not (bool value).
9. check_rep – if a given symbol exist the gives out "true" for a single definition and "false" for multiple definitions.
10. search – search for a given element in a given list as a bool value.
11. lispy – gives out the string representation of a given term.
12. lookup – gives out term of a given symbol if exist in a given substitution list.
13. p_subs – prints the symbols in a given substitution list
14. sub_exist – gives boolean value if a given symbol is present in a given substitution list,
15. find_sub – gives the term for a symbol if present in a given substitution list.
16. ari – gives the arity of a given symbol from a list of symbols i.e. signature.

check_sig : checked the signature with the help of check1(check existence of a symbol) and check2(check repetetion of a symbol) functions

wfterm: there was a problem in implementing hence i commmented the code
size: calculated the size with help of fold_left

ht: calculated heigth with the help of add_lispy and lispy functions with writes the string representation of the term.

Size: gives the total number of nodes and variable(with or without value) in a given term with the help of fold_left function on a list.

vars: gives a list of variables with the help of a check4 function

subst: implements the given substitution over a given term

mgu: gives the list of substitutes for two terms t1 and t2 with the help of function apply2.