Ranjita Mekhe

Journal for Spring 2011

Week 2 (04/06/2011):

o In the first week, I worked on the FIVlist_to_case function which took instance from class Function_IV made by John. It took the input and returned a list of base and index_connections. This output would then be considered as input for case_to_FIVlist.

Week 3 (04/13/2011):

o In the second week, I worked on the errors that I had in the code. I rectified the mistakes and ran the code in PYTHON. I got the output as required and checked for two different examples. The only thing I am not sure of is the format of the output. I learned the method in which we can read each value of a list as required in the code.

Week 4 (04/20/2011):

o I finished working on the initial task now stored in the done.py file. Now I am working on one of the reduction proposition assigned to me. I wrote a code which would help to find the variable and the index over which we sum and integrate respectively. I then tried to check if I got the output.

Week 6 (05/04/2011):

o I tried to find out about keys and dictionary in PYTHON which was used in IV_connectivity method. I also worked on the new proposition assigned to me but have some douts. I wrote some part of the code but couldn't figure out the entire logic. I am not sure over which variable and index we need to integrate and sum over respectively. I will discuss these issues with Dr.Martin in the meeting.

Week 7 (05/11/2011):

o I worked on the same proposition and could get to run it but I am not sure of the result. The FIVlist I guess does not give the results as it should. I learned about PYTHON syntax for union,sets while I was coding. I will discuss this with Dr.Martin.

Week 8 (05/17/2011):

o I am working on a new proposition. I understood the logic but could not get it to run because of some error. I spend a lot of time trying to fix it but I guess I need some help from Dr.Martin and also worked on the description of the IV_connectivity routines.

Week 9 (05/24/2011):

o I worked on one new proposition and I guess I could run it successfully. I had difficulty to figure out an example to test the proposition but Dr.Martin helped me with it.

Week 10 (05/31/2011):

o I was assigned two propositions. The logic for both of them was almost the same with the only difference between their index connections. I guess I could get both of them working and giving the desired results as output.

Final Report for Spring Quarter 2011(06-08-2011)

In spring quarter, I was assigned to work on various propositions. Firstly, I wrote a PYTHON code for FIVlist_to_case subroutine which converted input of Function_IV to base and index connections. The base and index connections here form the graphical representation of all possible cases and are very important. This subroutine helped to cross check conversion of FIVlist to cases (base, index connections) and vice versa. After that I worked on coding in PYTHON of five propositions covering various cases calculated earlier. The names of the propositions are listed below. The coding for these propositions involved use of loop structures. While doing so in PYTHON, I learned its syntax and indentation as PYTHON is a language which follows indentation very strictly. Not only that, I also gained knowledge about a new concept, dictionary and its keys. I also learned about various methods and its uses associated with lists, tuples and sets in PYTHON like append, union, intersection, update, subsets, join etc. Along with that, I also wrote a detailed description of IV_connectivity method with example so that it would be useful for other people to understand how that method works.

I achieved a lot of valuable information and knowledge about PYTHON and research techniques after working over this project. It was a very good learning experience for me and Dr. Martin was very helpful throughout the project.

Propositions:

1)prop_compgenericgenscalargengeneric

2)prop_pictggChainambbma

3)prop_scalarfourscalar

4)prop_gggChainannabbmm

5)prop_gggChainannabmmb.