

## Assignment #1

Due: Friday 13<sup>th</sup> of September, 2019 before 11:55 pm

Note:

1. Late submissions receive zero credit.
  2. If you write only the correct answer without steps you get very low credit.
  3. Submit in hard form.
  4. Do not knock at the door. Just slide beneath the door.
  5. Total marks are 40
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Q:- 1 Write a program that will accept a proposition in one of the following forms

**[Points 40]**

- a) Implication
- b) Converse
- c) Inverse
- d) Contrapositive.

And then convert it into its corresponding other three forms. For instance, If I provide the proposition in implication form  $\neg p \rightarrow q$  then it should compute the remaining three forms. Your program should have two inputs. One for the input proposition and another one for the types of the proposition which can be either implication, converse, inverse or contrapositive.

Test your program with the following.

1.  $\neg p \rightarrow q$  (Contrapositive)
2.  $\neg p \rightarrow q$  (Inverse)
3.  $\neg p \rightarrow q$  (Converse)
4.  $\neg p \rightarrow q$  (Implication)

Submit to me:

1. Your program source code
2. Run all the test cases showing clearly all the output from your program. For each test case, there should be three outputs. (If you took a print and I am unable to see the output then you will not receive any marks)

Good luck