

# **Persistent Stack**

**Main Concept in Persistent Stack**

**Kushal Das 30/12/2021**

**Here I have used pointer machine to implement my fully persistent Stack**

I have taken some basic functions of stack

- Push
- Pop
- IsEmpty
- Print

I have taken the print function just to see what the stack was in a particular version.

In this I have implemented a list using pointer machine in which each node has:

- Data
- Next pointer
- Version
- Back pointer
- Modifications log
  - Data
  - Next and Back pointers
  - Version

Then I implemented an **insert at an index** and **delete at an index** in any version functions.

Then for stack the index is 0 i.e. insert at start and delete at start.