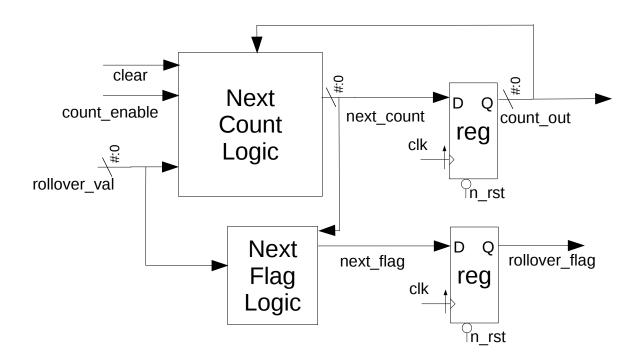
## Lab3 Flexible Counter RTL Diagram



## Next Count Logic:

If clear is asserted, set next\_count to 0. If count\_enable is asserted, check if count\_out equals rollover\_val. If it does, set next\_count to 1, otherwise increment next\_count. If neither clear nor count\_enable is asserted, next\_count equals count out.

## Next Flag Logic:

If next count equals rollover val, next flag is 1, otherwise next flag is 0.