## CSN-232

## Assignment-Staene free Reader-Weiter

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Desir a paistra (193)

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> Below is the pseudocode of the functions which will prevent stasuation in Reader-writers problem.

- 1 Declare class Database.
- 1 In database declare int sceaders = 0; bool writing = False;

int waiting Writers = 0;

bool readers Turn = False;

- Queue Q to store weiting readers or weiters. 3 Declare thread functions acquire Read(), acquire weite(), releau Read(), rebeau write(). (it searchest lives :
- \* Pseudocode for acquire Read() -
- (i) while (weiting 11 (waiting Writers > 0 Ere, I readers Turn)) {. call wait function II add process to queue
- ( mutex I initialized to ) (ii) Maddelsvery weit (mutex); readels 4+; signal (mutex 1); : Chillian the

```
11 mutex2 initialized to 1
 (1) while (neaders > 011 weiting) {
              wait (mutex 2);
                             waiting wenter ++;
                               signal (mutex 2);
                           call , wait () function
 (11) if (waiting weiters > 0) {
 wait (mutex 2);
                              weiting weiters -- ;
                                                                                                                Declare of hour Buth buth
                  signal (mutex 2);
                                                                                                                              - अंतिक अध्यक्षिक अधिकार स्टिन्
  (iii) writing = trui;
                                                                                                         - Large today - tales
   * Pseudocode for rebease Read()
                                                                                                             To a realize the property of
  (1) wait (muter)
                                                                                                                   had the following the
                      treaders --;
                 (signal (muter)) ) how a symmetry of the property of the
                                                                                             A lease regall & robered woulded.
(1) headofsTuen z false;
                                                                                                    a figure of the first occasion handle
(111) if (reader = 20) {
                  notify() man i are a sure when the property of the property of
                                                                                  the solution of they be for they waster to be
   * Pseudocode for release wen'tel)
                                                                                                        Kill School good for at carl
 (1) writing = False;
("1) readels Turn = TRM;
                                                                                                                                   A M Solid St.
                                                                                                                                 A Markey many
(iii) notifyt);
```

\* Pseudocode for acquire Weitel) -