1. Open database and create a cursor to iterate through query results
2. Generate a list of subject\_id’s. This can be the entire database or a subset.
3. Create a directory to place subject files
4. Create a list of item\_ids to include in the output files. The current items included are:
   1. '50826':'Albumin',
   2. '50863':'ALP',
   3. '50861':'ALT',
   4. '50878':'AST',
   5. '50885':'Bilirubin',
   6. '51006':'BUN',
   7. '50907':'Cholesterol',
   8. '51081':'Creatinine',
   9. '225310':'DiasABP',
   10. '190':'FiO2',
   11. '198':'GCS',
   12. '50809':'Glucose',
   13. '50931':'HCO3',
   14. '50882':'HCT',
   15. '220045':'HR',
   16. '50971':'K',
   17. '50813':'Lactate',
   18. '50960':'Mg',
   19. '224':'MAP',
   20. '224322':'MAP',
   21. '722':'MechVent',
   22. '50983':'Na',
   23. '220180':'NIDiasABP',
   24. '220052':'NIMAP',
   25. '220179':'NISysABP',
   26. '778':'PaCO2',
   27. '490':'PaO2',
   28. '780':'pH',
   29. '51265': 'Platelets',
   30. '618':'RespRate',
   31. '3603':'RespRate',
   32. '220210':'RespRate',
   33. '50817':'SaO2',
   34. '225309':'SysABP',
   35. '50825':'Temp',
   36. '3655':'Temp',
   37. '51002':'TroponinI',
   38. '51003':'TroponinII',
   39. '51108':'Urine',
   40. '51301':'WBC',
   41. '763':'Weight',
   42. '224639':'Weight'
5. Process each patient to create their own file
   1. Fetch the last hospital admission
      1. –skip if no admissions recorded
   2. Select all hospital measurement (e.g. Albumin) entries for the item\_ids associated with each subject on the hospital admission chosen above and place into a map
      1. –skip patients with no entries
   3. –skip patients with less than 48 hours in the chosen hospital admission and/or if data is missing
   4. Get the patient’s age
      1. –skip those with ages of < 15
   5. Create subject file
      1. Write record\_id (subject\_id)
      2. Write age
      3. Write gender
      4. Write height
         1. If result is in inches, convert to centimeters
      5. Write ICU type
         1. CCU = 1
         2. CSRU = 2
         3. MICU = 3
         4. SICU = 4
      6. Write weight
      7. Iterate through the hospital measurements of each patient within the first 48 hours
         1. MechVent is converted to 1 if an entry exists
         2. Using a regular expression, ignore entries that have strings as values