- It can handle varying numbers of people

- The results of each run need to be saved

- The pairings will be run every 1 to 2 weeks

- The PM wants to be able to specify up to 5 people (0-5) who will be the primary of any pair. They should never pair with another primary

- The primaries can change at each stage of the project

- No two people should work with each other until they have been paired with at least 4 other people

- The code should have the option to email the people to inform them who their next partner will be. The project manager should be included in any communications.

Your code will be used by other project managers with similar needs so should be production ready with:

- Ability to optionally report on progress

- Full error checking, reporting and handling

- Ability to accept pipeline input where appropriate

- Help is available

Workflow:

The PM wants to be able to specify up to 5 people (0-5) who will be the primary of any pair. They should never pair with another primary

The primaries can change at each stage of the project

Pseudo Code:

1. Display Names of people in names.txt
   1. Write-Output > These are the list of people who will be paired
   2. If ($names%2 –eq0)
      1. Write-Output > This is an even list, which will create $names.length/2 pairs
   3. Else
      1. Write-output > Do you want the odd-person to be in a single-pair, or do you want to have 3 people in the group.
      2. $choice = 3pair/Single
2. Please enter the names of the primary from the list of names
   1. $primary = Amy,Bob,David
   2. If ($primary in $names)
      1. Write-output “Pairing algorithm was executed on Get-Date). Results of the pairing will be saved as 1\_pairs\_01232013.csv
      2. Execute Pairing Code based on Rules 🡪 **(Pseudo Code Later for 2.b.ii**
   3. If ($primary[$i] –not in $names
      1. Write-output “Amy, doesn’t’ exist in the pairs list. Do you want to add her to the list? Else, only (Bob,David), will be included for pairing as primary.
      2. $primaryChoice = Include / Amy / OR Discard
   4. Display Results of Primary pairing.
   5. OPTIONAL CONDITION FOR SECOND and LATER RUN

**(Pseudo Code Later for 2.b.ii**

1. Seeding Variables
   1. $primary = [0..5]
   2. $primary.count >0
   3. If ($primaryChoice).
      1. Add name to Primary Array
         1. $primary.Add($primaryChoice) /
2. Constraints for Primary Pairing
   1. should never pair with another primary
   2. The primaries can change at each stage of the project
      1. 🡪 Ask User Input.
   3. - No two people should work with each other until they have been paired with at least 4 other people
   4. - The code should have the option to email the people to inform them who their next partner will be. The project manager should be included in any communications.
3. PESUDOCODE
   1. Create an ignoreList, which will contain all combinations which cannot be part of a pair.
      1. $ignorelist = @()
      2. Create all pairs for primary – A,A, A-B, A-D, B-A,
      3. Includes all combination of primary-primary pair
      4. Imports-XML of LastRuns
         1. Gci filename.csv | where lastmodifieddate
         2. Get last4 Execution Runs (FileName has to be Pre-Pended with COUNT). First one starts with 1.
         3. Add it to ignoreList
      5. Create a MxM matrix of Names.
      6. Remove elements in IgnoreList from the Names Matrix (Set it to ZERO)
      7. Enumerate Matrix