# Assignment 03

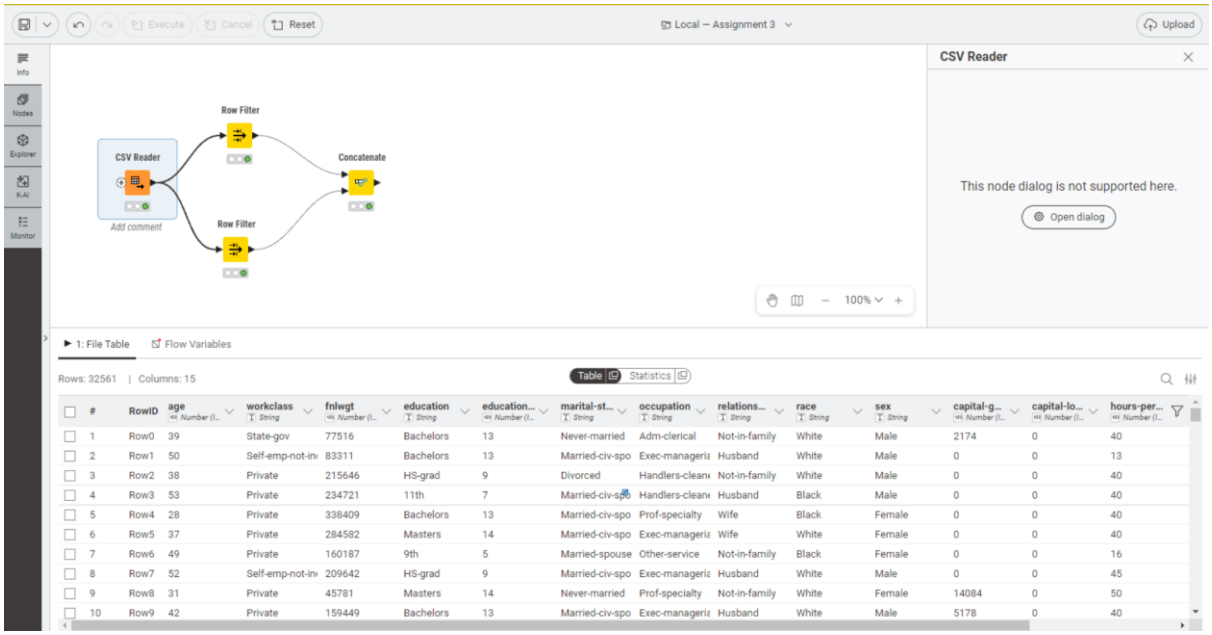
1) Read the adult.csv file available in the data folder on the KNIME Hub. The data are provided by the UCI Machine Learning Repository.

2) Extract people with age between 20 and 40 (both included) and working in a workclass starting with "S"

3) Extract people with age between 40 and 60 (both included) and working in a workclass starting with "P"

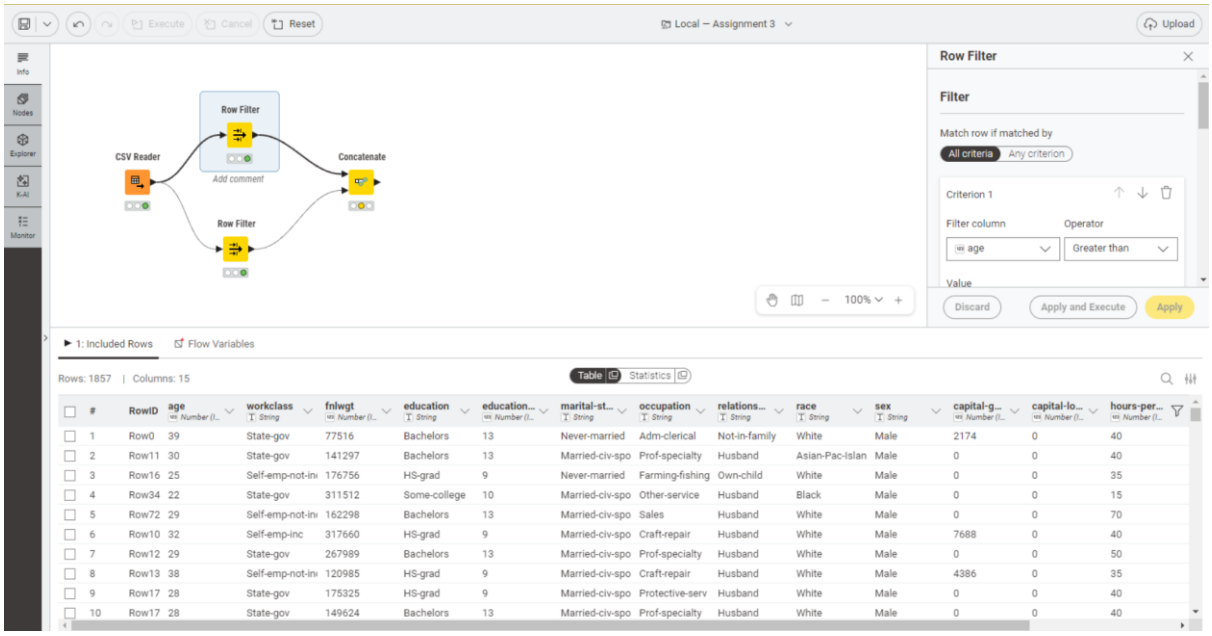
4) Concatenate both subsets into a single data table

**Step 1:** Read the adult.csv file



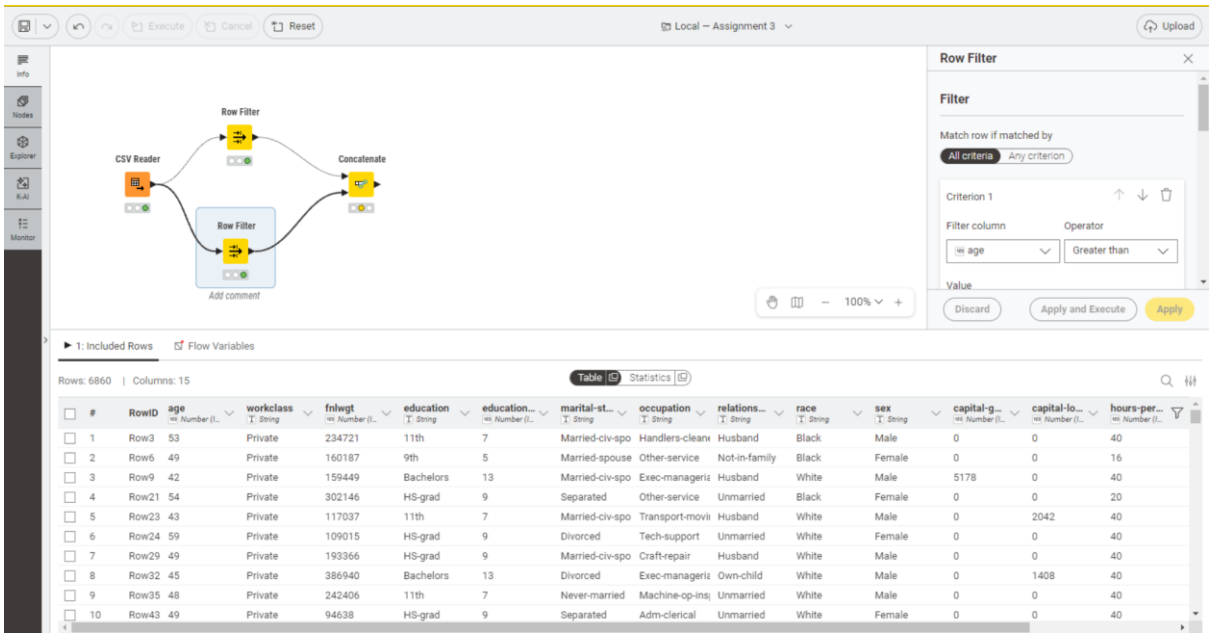

| # | RowID | age | workclass | fnlwgt | education | education... | marital-st... | occupation | relations... | race | sex | capital-g... | capital-lo... | hours-per... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Row0 | 39 | State-gov | 77516 | Bachelors | 13 | Never-married | Adm-clerical | Not-in-family | White | Male | 2174 | 0 | 40 |
| 2 | Row1 | 50 | Self-emp-not-in | 83311 | Bachelors | 13 | Married-civ-spo | Exec-managerial | Husband | White | Male | 0 | 0 | 13 |
| 3 | Row2 | 38 | Private | 215646 | HS-grad | 9 | Divorced | Handlers-clean | Not-in-family | White | Male | 0 | 0 | 40 |
| 4 | Row3 | 53 | Private | 234721 | 11th | 7 | Married-civ-spo | Handlers-clean | Husband | Black | Male | 0 | 0 | 40 |
| 5 | Row4 | 28 | Private | 338409 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Wife | Black | Female | 0 | 0 | 40 |
| 6 | Row5 | 37 | Private | 284582 | Masters | 14 | Married-civ-spo | Exec-managerial | Wife | White | Female | 0 | 0 | 40 |
| 7 | Row6 | 49 | Private | 160187 | 9th | 5 | Married-spouse | Other-service | Not-in-family | Black | Female | 0 | 0 | 16 |
| 8 | Row7 | 52 | Self-emp-not-in | 209642 | HS-grad | 9 | Married-civ-spo | Exec-managerial | Husband | White | Male | 0 | 0 | 45 |
| 9 | Row8 | 31 | Private | 45781 | Masters | 14 | Never-married | Prof-specialty | Not-in-family | White | Female | 14084 | 0 | 50 |
| 10 | Row9 | 42 | Private | 159449 | Bachelors | 13 | Married-civ-spo | Exec-managerial | Husband | White | Male | 5178 | 0 | 40 |

**Step 2:** Extract people with age between 20 and 40 (both included) and working in a work class starting with “S”



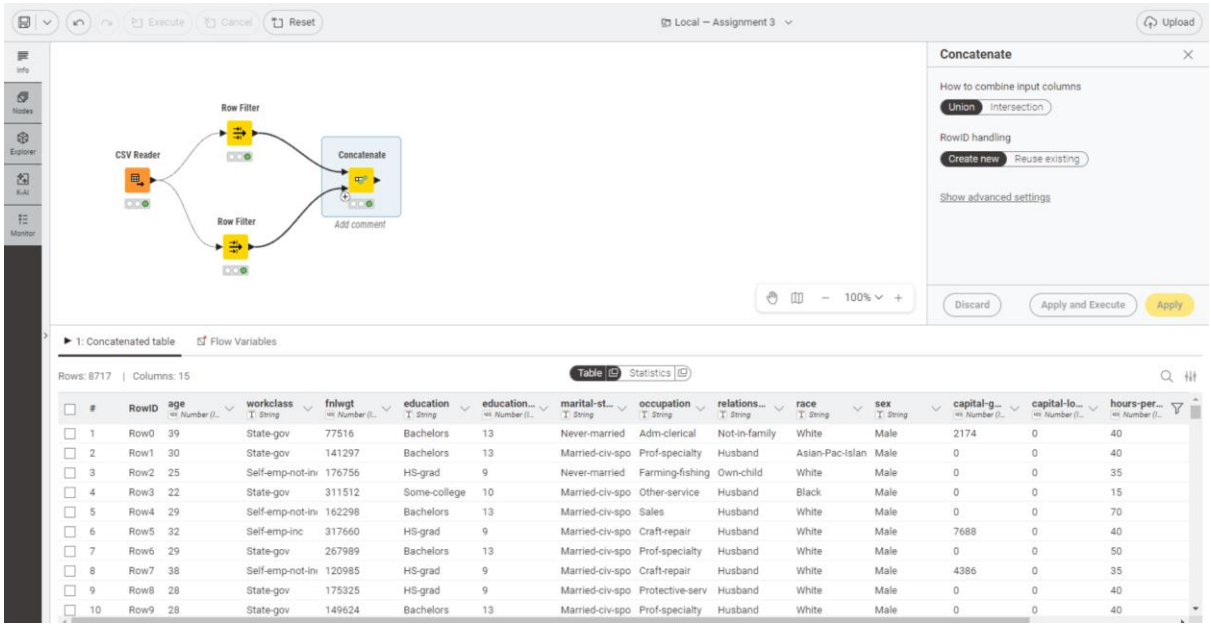

| # | RowID | age | workclass | fnlwgt | education | education... | marital-st... | occupation | relations... | race | sex | capital-g... | capital-lo... | hours-per... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Row0 | 39 | State-gov | 77516 | Bachelors | 13 | Never-married | Adm-clerical | Not-in-family | White | Male | 2174 | 0 | 40 |
| 2 | Row11 | 30 | State-gov | 141297 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Husband | Asian-Pac-Islan | Male | 0 | 0 | 40 |
| 3 | Row16 | 25 | Self-emp-not-in | 176756 | HS-grad | 9 | Never-married | Farming-fishing | Own-child | White | Male | 0 | 0 | 35 |
| 4 | Row34 | 22 | State-gov | 311512 | Some-college | 10 | Married-civ-spo | Other-service | Husband | Black | Male | 0 | 0 | 15 |
| 5 | Row72 | 29 | Self-emp-not-in | 162298 | Bachelors | 13 | Married-civ-spo | Sales | Husband | White | Male | 0 | 0 | 70 |
| 6 | Row10 | 32 | Self-emp-inc | 317660 | HS-grad | 9 | Married-civ-spo | Craft-repair | Husband | White | Male | 7688 | 0 | 40 |
| 7 | Row12 | 29 | State-gov | 267989 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Husband | White | Male | 0 | 0 | 50 |
| 8 | Row13 | 38 | Self-emp-not-in | 120985 | HS-grad | 9 | Married-civ-spo | Craft-repair | Husband | White | Male | 4386 | 0 | 35 |
| 9 | Row17 | 28 | State-gov | 175325 | HS-grad | 9 | Married-civ-spo | Protective-serv | Husband | White | Male | 0 | 0 | 40 |
| 10 | Row17 | 28 | State-gov | 149624 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Husband | White | Male | 0 | 0 | 40 |

**Step 3:** Extract People with age between 40 and 60 (both included) and working in a work class starting with “P”




| # | RowID | age | workclass | fnlwgt | education | education... | marital-st... | occupation | relations... | race | sex | capital-g... | capital-lo... | hours-per... |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Row3 | 53 | Private | 234721 | 11th | 7 | Married-civ-spo | Handlers-cleani | Husband | Black | Male | 0 | 0 | 40 |
| 2 | Row6 | 49 | Private | 160187 | 9th | 5 | Married-spouse | Other-service | Not-in-family | Black | Female | 0 | 0 | 16 |
| 3 | Row9 | 42 | Private | 159449 | Bachelors | 13 | Married-civ-spo | Exec-managerial | Husband | White | Male | 5178 | 0 | 40 |
| 4 | Row21 | 54 | Private | 302146 | HS-grad | 9 | Separated | Other-service | Unmarried | Black | Female | 0 | 0 | 20 |
| 5 | Row23 | 43 | Private | 117037 | 11th | 7 | Married-civ-spo | Transport-movi | Husband | White | Male | 0 | 2042 | 40 |
| 6 | Row24 | 59 | Private | 109015 | HS-grad | 9 | Divorced | Tech-support | Unmarried | White | Female | 0 | 0 | 40 |
| 7 | Row29 | 49 | Private | 193366 | HS-grad | 9 | Married-civ-spo | Craft-repair | Husband | White | Male | 0 | 0 | 40 |
| 8 | Row32 | 45 | Private | 386940 | Bachelors | 13 | Divorced | Exec-managerial | Own-child | White | Male | 0 | 1408 | 40 |
| 9 | Row35 | 48 | Private | 242406 | 11th | 7 | Never-married | Machine-op-insp | Unmarried | White | Male | 0 | 0 | 40 |
| 10 | Row43 | 49 | Private | 94638 | HS-grad | 9 | Separated | Adm-clerical | Unmarried | White | Female | 0 | 0 | 40 |

**Step 4:** Concatenate both subsets into a single data

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| 1 | Row0 | 39 | State-gov | 77516 | Bachelors | 13 | Never-married | Adm-clerical | Not-in-family | White | Male | 2174 | 0 | 40 |
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| 3 | Row2 | 25 | Self-emp-not-in | 176756 | HS-grad | 9 | Never-married | Farming-fishing | Own-child | White | Male | 0 | 0 | 35 |
| 4 | Row3 | 22 | State-gov | 311512 | Some-college | 10 | Married-civ-spo | Other-service | Husband | Black | Male | 0 | 0 | 15 |
| 5 | Row4 | 29 | Self-emp-not-in | 162298 | Bachelors | 13 | Married-civ-spo | Sales | Husband | White | Male | 0 | 0 | 70 |
| 6 | Row5 | 32 | Self-emp-inc | 317660 | HS-grad | 9 | Married-civ-spo | Craft-repair | Husband | White | Male | 7688 | 0 | 40 |
| 7 | Row6 | 29 | State-gov | 267989 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Husband | White | Male | 0 | 0 | 50 |
| 8 | Row7 | 38 | Self-emp-not-in | 120985 | HS-grad | 9 | Married-civ-spo | Craft-repair | Husband | White | Male | 4386 | 0 | 35 |
| 9 | Row8 | 28 | State-gov | 175325 | HS-grad | 9 | Married-civ-spo | Protective-serv | Husband | White | Male | 0 | 0 | 40 |
| 10 | Row9 | 28 | State-gov | 149624 | Bachelors | 13 | Married-civ-spo | Prof-specialty | Husband | White | Male | 0 | 0 | 40 |