**Python Functions**

**Python functions to solve typical problems when working with Applied TAM style date formats like “08/06/A0” from excel or flat files**

**Also these solutions**

Reads Excel files with TAM-style date formats

Handles blanks, nulls and malformed dates

Converts valid TAM dates to standard YYYY-MM-DD

Outputs a cleaned Excel file

**Handles:**

Missing or blank values: returns””

Invalid decade codes: returns””

Converts all valid TAM dates like 08/06/A0,30/01/B2

Adds a new column with \_cleaned suffix

**1.Using Pandas:**

def convertDates(filePath, sheetName, columnName, outputPath):

df = pd.readExcel(filePath, sheetName = sheetName)

df[columnName + “\_converted”] = df[column\_name].astype(str).apply(dateToStandard)

df.toExcel(outputPath, index = False)

**2. To Convert TAM-Encoded Date**

def dateToStandard(dateStr):

day,month,code = dateStr.split(‘/’)

decadeLetter = code[0]

.upper()

year = int(code[1])

decade = {‘A’:2020,’B’:2030}

year = decade[decadeLetter] +year

Return datetime(year, int(month, int(day)).strftime(‘%Y-%m-%d’)

**3. Without Excel:**

def convertDateList(dateList):

Return [dateToStandard(date) for date in dateList]

sampleDates = [“08/06/A0”, “30/01/B2]

converted = convertDateList(sampleDates)

**For any kind of incorrect values in code we can use python**

**Trim Extra spaces:**

df[“name”] = df[“name”].str.strip()

**Detect and remove invalid characters:**

df[“name”] = df[“name”].str.replace(r”[^A-Za-z\s]”,””, regex=True)

**Remove or fill blank values:**

df.fillna(“unknown”)

df[“Name”].fillna(“no name”)

**Drop Duplicates:**

df = df.dropDuplicates()

**Convert Text to proper format:**

df[“name”] = df[“name”].str.title()