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[ ]: # Identify three real-life scenarios in which an array could be used for storing information.
# Provide a sample code segment that illustrates how to store data in an array for one of your outlined scenarios. Provide a rationale for your response
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[ ]: ## Array is the collection data elements of same type
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[ ]: # Some of the Real time scenarios
# 1. I want to store all Calendar dates of a given year to single variable and use it for Daily batch cycle processing.
#    ALL values of same data type string.
# 2. Would like to store Student marks of all subjects into one single variable. All values of same data type interger.
# 3. I want to track employee working hours of a given month in a single variable. All values of same data type float.
# 4. I want to store names of all items displayed in store in a single variable. All values of same data type String.
# 5. I want to store 2 dimensional values of matrix in a single variable. All values of same data type integer.
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•[11]: # Sample code segment scenario-1.
##### Store all US holiday dates of year 2024 in a single variable called usHolidays2024
##### The purpose of the variable usHolidays2024 is to check if a given batch cycle is exists array variable usHolidays2024. If present
##### Current batch need to be skipped for processing.
import numpy as np
isHoliday = False

usHolidays2024 = np.array(['01/01/2024','01/15/2024','02/19/2024','05/27/2024','07/04/2024',
                           '09/02/2024','10/14/2024','11/11/2024','11/28/2024','12/25/2024'])
daily_batchcycle_date = input('Enter the cycle date in mm/dd/yyyy format :')

#### For loop to check if daily batch cycle is a USA holiday or not

for i in usHolidays2024:
    if i == daily_batchcycle_date:
        isHoliday = True
if isHoliday:
    print( " Entered date is USA holiday and there will not be any batch cycle processing ")
else:
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