Project 2 Design Document

**Project Requirements:**

In this program, we are converting the Hungarian Dates to American Standard Date. So, the user would enter 8-digit number in the console & the American standard Date output will be displayed on the screen. And any zeros would be deleted.

Example: 20191216 -> 12/16/2020

**Program Inputs:**

* Hungarian Date as input (8-digit Number)
  + - Int date

**Program Output:**

* Day Variable would be used to store the DAY extracted from the Hungarian Date
  + - Int dd
* Month Variable would be used to store the MONTH extracted from the Hungarian Date
  + - Int mm
* Year variable would be used to store the YEAR extracted from the Hungarian Date
  + - Int yy

**Test Plan:**

Program inputs

**Integer limit (date>0)**

**Date = 8 digit**

**Input Cases:**

1. 20191220
2. 20200101
3. 17010301
4. 202111011

**Note:** The zero in front of day or month would be omitted.

**Test Output:**

1. **Variables state**

date = 20191220

dd = 20

date = 201912

mm = 12

date = 2019

yy = 2019

**output should be:**

Date: 12/20/2019

Test Case Pass

1. **Variables state**

date = 20200101

dd = 1

date = 202001

mm = 1

date = 2020

yy = 2020

**output should be:**

Date: 1/1/2020

Test Case Pass

1. **Variables state**

date = 17010301

dd = 1

date = 170103

mm = 3

date = 1701

yy = 1701

**output should be:**

Date: 1/3/1701

Test Case Pass

1. **Variable State**

date = 202111011

**output should be:**

Error: The date is more than 8 digits.

Test Case Fail

**Solution Overview:**

Algorithm steps for the Program.

1. Start program with declaring Variables for user input & data manipulations

date, dd, mm, yy

Variables for output

dd, mm, yy

1. Input from user
   * + Hungarian Date in date variable

After input the calculation would be process on the input data

Find dd = date % 100

date = date / 100

1. Now, calculate month

mm = date % 100

date = date / 100

1. At last, calculating year

yy = date

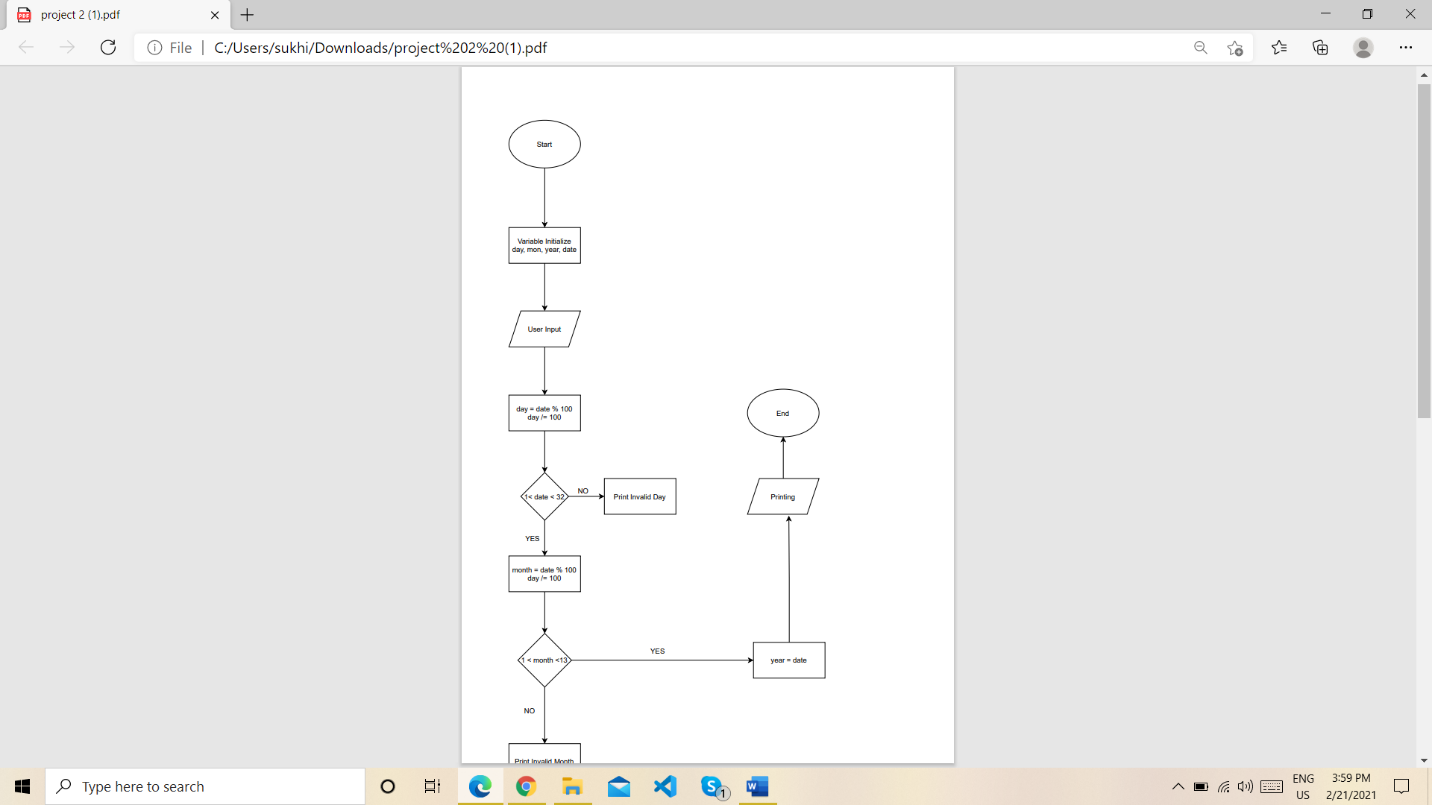
1. So, we have dd, mm, yy

Now we can print the desired output(MM/DD/YYYY) on the screen.

* + - Print **mm**
    - Print **dd**
    - Print **yy**

1. End of Program

**Algorithm Flowchart:**

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