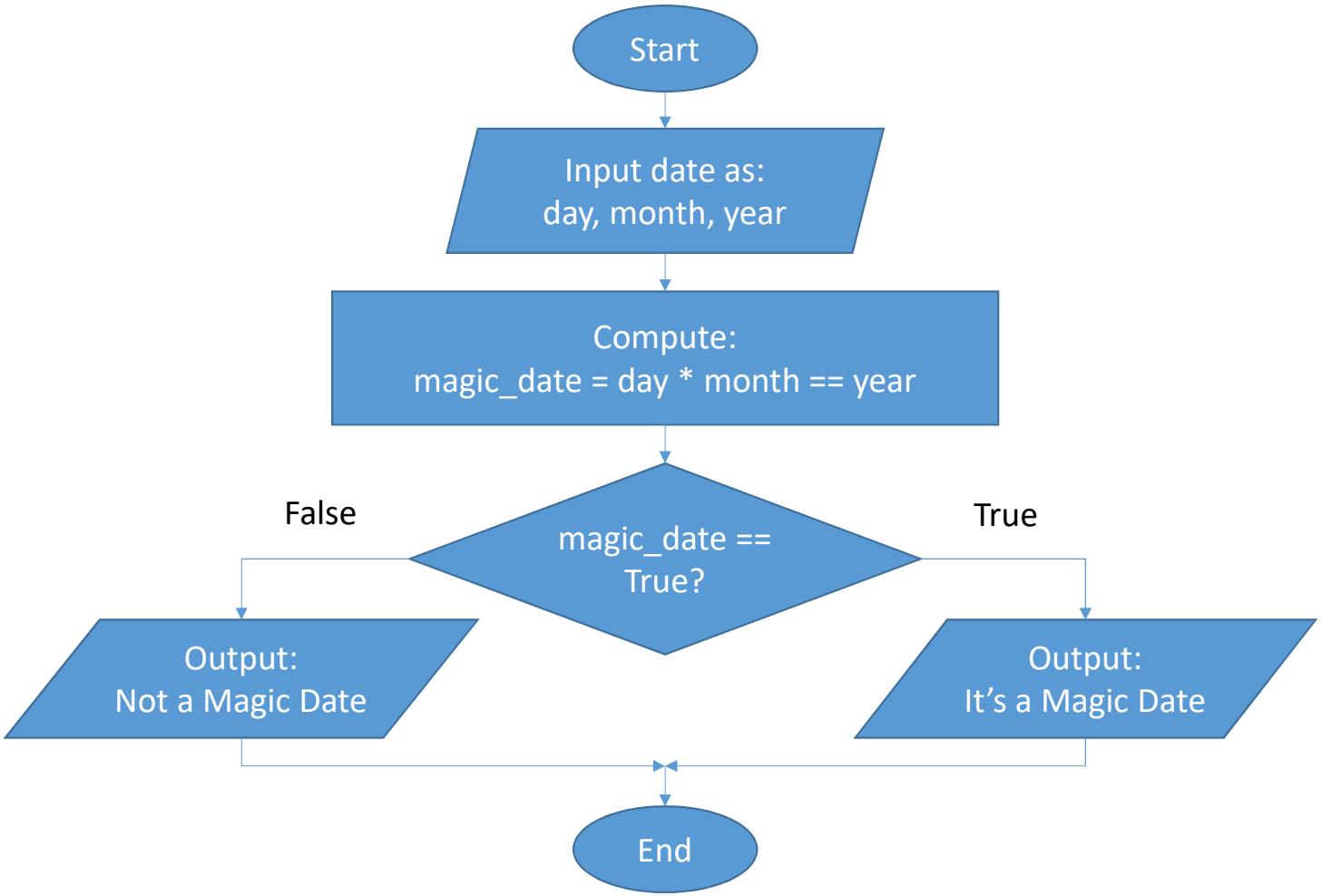
Homework 3 Solution

COMSC-122

Fall 2017

Homework-04: magic_date.py



Homework-03A: magic_date.py

```
# MagicDates.py
# Determines if the day*month is equal to the two digit year typed in
day = int(input('Enter the day of the month as an Integer: '))
month = int(input('Enter the month of the year as an Integer: '))
year = int(input('Enter the year of the Century as a two digit Integer: '))

magic_date = (day * month == year)

if magic_date:
        print(month,'/',day,'/',year , ' is a Magic Date.', sep='')
else:
        print(month,'/',day,'/',year , ' is Not a Magic Date.', sep='')

exit = input('')
```

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```
# MagicDates.py
# Determines if the day*month is equal to the two digit year typed in
# In addition, this program checks to see if the date is a Valid Date
day = int(input('Enter the day of the month as an Integer: '))
month = int(input('Enter the month of the year as an Integer: '))
year = int(input('Enter the year of the Century as a two digit Integer: '))
valid_date = True
if day <= 0 or month <= 0 or month > 12 or year < 0 or year > 99:
        valid_date = False
if month==1 or month==3 or month==5 or month==7 or month==8 or month==10 or month==12:
        if day > 31:
                valid_date = False
elif month == 2:
        if year % 4 == 0:
                if day > 29:
                        valid_date = False
        else:
                if day > 28:
                        valid_date = False
elif (month == 4) or (month == 6) or (month == 9) or (month == 11):
        if day > 30:
                valid_date = False
```

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```
# Now we know if valid_date is True or if it is False,
# So we can proceed with the Magic Date calculation
if valid_date:
        print('The date is a valid date!')

        magic_date = day * month == year

        if magic_date:
                print(month,'/',day,'/',year , ' is a Magic Date.', sep='')
        else:
                print(month,'/',day,'/',year , ' is Not a Magic Date.', sep='')
else:
        print('The date is NOT a valid date!')

exit = input('')
```

Homework-3B: Run

- Here are two cases that were run by Homework3c.py