

Python Assignment Day4 Solution:

1. Python program to print the calendar of a given month and year.

Note: Use 'calendar' module.

```
import calendar

y = int(input("Input the year : "))

m = int(input("Input the month : "))

print(calendar.month(y, m))
```

2. Program to calculate number of days between two dates

```
from datetime import date

f_date = date(2014, 7, 2)

l_date = date(2015, 7, 11)

delta = l_date - f_date

print(delta.days)
```

3. Program for Check if all digits of a number divide it

Given a number n, find whether all digits of n divide it or not.

Examples:

Input : 128

Output : Yes

128 % 1 == 0, 128 % 2 == 0, and 128 % 8 == 0.

Input : 130

Output : No

We want to test whether each digit is non-zero and divides the number. For example, with 128, we want to test $d \neq 0 \ \&\& \ 128 \% d == 0$ for $d = 1, 2, 8$. To do that, we need to iterate over each digit of the number.

```

# Function to check the divisibility of the number by its digit.
def checkDivisibility(n, digit) :

    # If the digit divides the number then return true else return false.
    return (digit != 0 and n % digit == 0)

# Function to check if all digits of n divide it or not
def allDigitsDivide( n) :

    temp = n
    while (temp > 0) :

        digit = n % 10
        if ((checkDivisibility(n, digit)) == False) :
            return False

        temp = temp // 10

    return True

# Driver function
n = 128

if (allDigitsDivide(n)) :
    print("Yes")
else :
    print("No" )

```

4. Program to find the most occurring character and its count

We can solve this problem quickly in **python using Counter() method**. Simple Approach is to

- 1) Create a dictionary using Counter method having strings as keys and their frequencies as values.
- 2) Find the maximum occurrence of a character i.e. value and get the index of it.

```

from collections import Counter

def find_most_occ_char(input):

    #create dictionary using counter method which will have strings as key & their frequencies as value
    wc = Counter(input)

    # Finding maximum occurrence of a character and get the index of it.
    s = max(wc.values())
    i = wc.values().index(s)

    print wc.items()[i]

# Driver program
if __name__ == "__main__":
    input = 'geeksforgeeks'
    find_most_occ_char(input)

```

6.